UNIVERSITY
OF MICHIGAN

JUL

MILITARY CONSTRUCTION APPROPRIATIONS FOR 1956

HEARINGS

BEFORE THE

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES

EIGHTY-FOURTH CONGRESS

FIRST SESSION

SUBCOMMITTEE ON DEPARTMENT OF THE ARMY APPROPRIATIONS

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MILITARY CONSTRUCTION APPROPRIATIONS FOR 1956
DEPARTMENT OF THE ARMY

MONDAY, JUNE 27, 1955.

WITNESSES

MAJ. GEN. W. S. LAWTON, CHIEF, BUDGET DIVISION, OFFICE OF THE COMPTROLLER OF THE ARMY
COL. W. R. SHULER, CHIEF, CONSTRUCTION DIVISION, OFFICE, DIRECTOR OF INSTALLATIONS, DEPUTY CHIEF OF STAFF FOR LOGISTICS
R. B. FOSTER, JR., CHIEF, PUBLIC WORKS PLANNING BRANCH, CONSTRUCTION DIVISION, OFFICE, DIRECTOR OF INSTALLATIONS, DEPUTY CHIEF OF STAFF FOR LOGISTICS
COL. S. MALEVICH, ASSISTANT FOR ARMY CONSTRUCTION, OFFICE, ASSISTANT CHIEF OF ENGINEERS FOR MILITARY CONSTRUCTION
H. B. ZACKRISON, CHIEF, ENGINEERING DIVISION, OFFICE, ASSISTANT CHIEF OF ENGINEERS FOR MILITARY CONSTRUCTION
H. D. VAN KUREN, CHIEF, ORDNANCE INSTALLATIONS AND CONSTRUCTION BRANCH, OFFICE OF PROGRAM COORDINATION
LT. GEN. B. M. BRYAN, SUPERINTENDENT OF UNITED STATES MILITARY ACADEMY
MAJ. GEN. S. D. STURGIS, CHIEF OF ENGINEERS
COL. A. J. McCUTCHEN, POST ENGINEER, UNITED STATES MILITARY ACADEMY
C. K. PANISH, CHIEF, ENGINEERING DIVISION, NEW YORK DISTRICT, CORPS OF ENGINEERS
LT. COL. ROBERT T. PENNELL, ORGANIZATION AND TRAINING DIVISION, OFFICE, ASSISTANT CHIEF OF STAFF, G3

MILITARY CONSTRUCTION, ARMY

Amounts available for obligation

	Presently available, fiscal year 1956	Revised estimate, fiscal year 1956	Difference (+ or −)
Appropriation or estimate		$501,346,000	+$501,346,000
Unobligated balance brought forward	$251,994,292	280,994,292	+29,000,000
Total available for obligation	251,994,292	782,340,292	+530,346,000
Unobligated balance carried forward		−257,340,292	−257,340,292
Obligations incurred	251,994,292	525,000,000	+273,005,708

Obligations by activities

Description	Presently available, fiscal year 1956	Revised estimate, fiscal year 1956	Difference (+ or −)
1. Zone of Interior construction	$147,794,292	$338,000,000	+$190,205,708
2. Overseas construction	102,200,000	177,000,000	+74,800,000
3. Acquisition of real estate	2,000,000	10,000,000	+8,000,000
Obligations incurred	251,994,292	525,000,000	+273,005,708

Obligations by objects

	Object classification	Presently available, fiscal year 1956	Revised estimate, fiscal year 1956	Difference (+ or −)
01	Personal services:			
	Permanent positions	$18,766,935	$18,766,935	
	Positions other than permanent	59,000	59,000	
	Regular pay in excess of 52-week base	72,065	72,065	
	Payment above basic rates	1,702,000	1,702,000	
	Total personal services	20,600,000	20,600,000	
02	Travel	600,000	600,000	
03	Transportation of things	500,000	750,000	+$250,000
04	Communication services	50,000	60,000	+10,000
05	Rents and utility services	100,000	125,000	+25,000
06	Printing and reproduction	200,000	225,000	+25,000
07	Other contractual services	20,000,000	35,000,000	+15,000,000
	Services performed by other agencies	50,000	100,000	+50,000
	Labor contracts with foreign governments	360,000	360,000	
08	Supplies and materials	8,000,000	12,000,000	+4,000,000
09	Equipment	4,000,000	6,000,000	+2,000,000
10	Lands and structures	197,503,292	449,149,000	+251,645,708
15	Taxes and assessments	31,000	31,000	
	Obligations incurred	251,994,292	525,000,000	+273,005,708

Mr. SIKES. General Lawton, we will resume the hearings which were initiated in the full Subcommittee on Defense. At this time I think we might proceed into some of the breakdowns of the request by the Army for construction items for fiscal 1956.

I should point out that there still are some general questions that we shall want to direct to the Secretary, but he was unable to be with us at this time, and because of the necessity of pushing this matter ahead in order to get it on the floor at an early date, we need not wait for that but will proceed with the details of the justifications.

Will you tell us whom you have with you this morning and what projects you want to present?

General LAWTON. As you have just stated, Mr. Chairman, we heard statements from the Secretary and Colonel Shuler in the hearings before the full subcommittee. I would like to start this morning with Colonel Shuler, Chief, Construction Division, Office, Director of Installations, Deputy Chief of Staff for Logistics, who would like to make a brief statement and then proceed with the detailed projects, starting with the technical services.

We also have Mr. Foster, who was present with Colonel Shuler at the time of the hearings before the full subcommittee.

Mr. SIKES. I consider, Colonel Shuler and Mr. Foster, that you proved yourselves quite capable in your presentations before the full subcommittee, and I am glad to see that you are prepared to continue with the Army panel for further consideration of your needs for fiscal year 1956 in the construction program.

Now, will you proceed?

GENERAL STATEMENT OF CHIEF OF CONSTRUCTION DIVISION

Colonel SHULER. Thank you, Mr. Chairman.

As the committee will recall, I testified before the full subcommittee and gave the full subcommittee a portion of my prepared statement in which I broke down the program by categories and showed the committee on a map where the major requests were located.

I would like this morning to continue and finish my opening statement at this time. With the permission of the chairman, I would like to first discuss the fiscal situation in the appropriation "Military construction, Army." I have a chart up on the wall. I will ask Mr. Foster to point to it as I go along.

I direct your attention to this chart [indicating] which, with one minor exception, is devoted to recent history of this appropriation. We believe that this chart is, in a sense, a report of the Army's stewardship in the field of military public works authorization and funds. The chart also includes an estimate of accomplishment for the next fiscal year.

As you can see, we have plotted, on a cumulative basis, authorizations, appropriations, obligations, and expenditures in dollars beginning January 1, 1951. Postwar authorizations and appropriations under the "Military construction, Army," heading began in June 1948 but quantitatively there was only slight progress during the period not shown on this chart.

The green line at the top of the chart is the progressive dollar total of military public works authorized by the Congress through the last session. The drop in this green line during 1953 represents the result of rescissions effected in Public Law 209, 83d Congress. The broken line to the right is the forecast and represents H. R. 5700, the military public works bill now awaiting action. If enacted as introduced, it would raise the net total authorization to $3,318,500,000.

The black line is a similar plot of cumulative appropriations. In fiscal year 1952 and fiscal year 1953 authorizations and appropriations having outdistanced obligations, the Department of the Army sought no new appropriations in fiscal years 1954 and 1955. This accounts for the flat section of the black line on the chart.

This brings me to the one exception to which I referred earlier. In fiscal year 1955, the Congress authorized family housing for the military departments but the appropriation was made to the Secretary of Defense. The Secretary of Defense in turn allocated these funds to the military departments. Technically, the $34 million which has been made available to the Army is not "Military construction, Army," money and should not be shown on this chart. We felt, however, that the committee would wish to see the whole military public-works picture and we have shown the authorization and appropriation for the Army's share of family housing. This accounts for the slight increase in appropriation totals shown for fiscal year 1955.

The projection through fiscal year 1956 represents the appropriation request now before you. It would increase the appropriation total to $2,862,700,000.

The red and blue lines on the chart are the cumulative obligations and expenditures of "Military construction, Army," funds. The large red and blue figures on these curves are the totals for the indicated fiscal years. For example, in fiscal year 1952, $554 million was obligated and $343 million was expended. Corresponding figures for the current fiscal year are estimated to be $402 million and $343 million, respectively. Our estimates for the fiscal year 1956 are $525 million in obligations and $400 million in expenditures.

There are two important aspects of this fiscal progress which I wish to emphasize. First, the large unobligated appropriation which existed in fiscal years 1952 and 1953 no longer exists. At the end of

this fiscal year, only 10 percent of total appropriations will remain unobligated. It is mandatory, therefore, that new appropriations be granted the Army if military construction is to continue.

The second element I would call to your attention is a phenomenon in the relationship of total obligations to total expenditures. The nature of construction is such that approximately 1 year elapses before the expenditure total reaches a corresponding point on the obligation curve. This is shown most graphically by comparing obligations and expenditures for successive years. Note that expenditures in fiscal year 1953 were $517 million and obligations in the preceding year were $554 million. Similarly, expenditures in fiscal year 1954 were within $7 million of the total obligations in fiscal year 1953. This is a relationship which holds fairly constant.

The committee might ask why projected obligations do not reach the projected total fund availability at the end of the fiscal year. The answer lies in the necessity of a minimum carryover of unobligated balances at the end of each year for efficient operation. If this is not done, the momentum in this large program is lost. Time must be allowed for the processing of new appropriations to the construction agencies in the field and the carryover at the end of the fiscal year bridges the gap which would otherwise exist. Continuity of a stable level of operations is essential to efficient and economical construction.

In order to hold this essential carryover to a minimum, the Army has improved its program of advance design. Utilizing the authority and funds granted by the Congress for this purpose, the Army has virtually all projects in the program before you designed to preliminary stage. Those which must be placed under contract this fall or those which are complex have been designed to final stage and these can be advertised for bids within 30 days after receipt of funds in the field. This is an additional benefit from the initial result of advance design in defining requirements and improving the accuracy of project estimates.

The Secretary has already stated that this military construction program has undergone numerous exhaustive reviews. The committee may be interested to know that this program was developed initially in the Department of the Army in July 1954 and was submitted to the Secretary of Defense on October 4, 1954. The review by the Office of the Secretary of Defense was sufficiently conclusive by January 1955 to permit the initiation of engineering and architectural design of these projects to preliminary stage. This work was accomplished under the technical supervision of the Chief of Engineers and with a few exceptions, the estimates of cost are predicated upon such design. Representatives of the Chief of Engineers will be present throughout the hearings to answer any question the committee may have with respect to design, construction methods, or costs.

Before concluding, there is one additional point I wish to emphasize. The Department of the Army has established in Army regulations, allowance of space for most common-use buildings and facilities. These regulations, Army Regulation 415–31, are usually referred to in individual project justification sheets as the factor on which the requirement was computed. We have used, with increasing success, this system of prescribed criteria as a means of insuring uniformity in Army facilities. I do not contend that these criteria are perfect, but they are the result of many months of study, represent the over-

whelming consensus of senior commanders, and are an excellent yardstick against which construction needs may be measured. I will be happy to furnish members of the committee with a copy of these criteria for their information if so desired.

With the permission of the committee, I propose to begin the review of the program with facilities for the Ordnance Corps, followed by those of the other technical services, then by the continental armies, and conclude with the overseas theaters. This presentation follows the order of justification books 1, 2, and 3. I must ask your indulgence in the fact that justifications for family housing are contained in a separate volume, labeled book 4, which will have to be read in conjunction with books 1, 2, and 3, respectively. From time to time it may be necessary to introduce supporting witnesses as experts in particular fields but in the main, I will handle the presentation.

The format of the justification books themselves is familiar to the committee, having been used by the Army for several years. If the committee wishes, however, I will be happy to describe these justification forms briefly for you.

Otherwise, if there are no questions, Mr. Chairman, may I now begin with the requirements of the Ordnance Corps, the first station being Aberdeen Proving Ground, Md., appearing on page 9 of book 1 and page 5 of book 4?

Mr. SIKES. I think it would be well for you to describe the justification forms you have spoken of.

Colonel SHULER. The Army's detailed justification data in support of the proposed fiscal year 1956 military public works legislation, consists principally of ENG forms 68a and 68c. The ENG form 68a contains general information on each of the installations included in the proposed legislation and a list of the proposed projects other than family housing at the installation. An ENG form 68c is prepared for each project and contains detailed justification data. These justification sheets are bound into books titled "Department of the Army Military Construction Project Justification Authorization and Appropriation, Fiscal Year 1956", March 21, 1955, and utilized in presenting the Army's request to the Congress.

ENG form 68a: The 68a lists the name and location of the installation and the nearest city or town. It gives the current and projected mission of the installation, states whether it is permanent or temporary, the year initially occupied by the Army, the number of acres leased and Government-owned, and present, World War II, and projected personnel strengths. The lower half of the 68a provides a list of projects proposed for new authorization and/or appropriation including dollar totals for the installation.

ENG Form 68c: The 68c repeats the project title and the amount of proposed authorization and/or appropriation as shown on the 68a. The 68c indicates whether the construction is: permanent, a new facility or replacement, of standard or special design, and gives physical dimensions and capacity. It also provides: a brief description of the item and any unusual features, the breakout of the cost estimate, information on how the need was computed, and the relationship of the project to other projects in the same program. The lower part of the 68c is a narrative justification of why the item is required and how the need is now being met.

Mr. SIKES. Any questions, Mr. Riley? I would like to say Mr. Riley is very well informed on this subject, having served as chairman

of the Subcommittee on Civil Functions and Military Construction in previous Congresses, and I rely very strongly on his background and experience and ability in this field.

Mr. RILEY. I note in the general statement, Mr. Chairman, that Colonel Shuler refers to H. R. 5700, and the bill as reported from the Committee on Armed Services is H. R. 6829.

Mr. FOSTER. It was H. R. 5700 throughout the Armed Services Committee hearings but the chairman of that committee, at the conclusion of the hearings, introduced a new clean bill, and when Colonel Shuler's statement was reproduced we did not have the new number.

Mr. RILEY. Are we going to consider justifications under the bill suggested by the Army or under the bill reported by the committee?

Colonel SHULER. I would say, sir, that we would consider justifications under the bill which was reported out by the committee. I think that was brought out the other day by Secretary Stevens.

Mr. RILEY. That was what I understood, that he said they would consider the congressional bill.

Colonel SHULER. I believe this point should be made, that our justification books have not been brought to the point of including a sheet for the item I believe you have in mind, but that is being worked on now in the Pentagon.

Mr. RILEY. I hope you will be able to get it over here before the committee marks up the bill.

Mr. SIKES. You intend to do that, I assume?

Colonel SHULER. Yes. Change sheets are being reproduced.

Mr. SIKES. Realizing that Mr. Cannon, the chairman of the full committee, wishes to have this work completed by Friday night, we will have to push right along in all these deliberations, and I wish to caution you to get that to us as quickly as possible.

Colonel SHULER. Yes, sir.

UNIFORMITY IN ARMY FACILITIES

Mr. RILEY. On page 7 of his general statement, Colonel Shuler calls attention to Army Regulation 415–31 prescribing criteria for standardization of those facilities which are in common use throughout the Army, and I, for one, would be very happy to have one of those. The committee on which I served several years ago I think spotlighted the necessity for having criteria for standard installations where they were in common use on the various bases, and I am satisfied the Army would save many millions of dollars by this procedure.

That is all, Mr. Chairman.

Mr. SIKES. Mr. Ford.

Mr. FORD. No questions.

Mr. SIKES. Mr. Flood, do you have any questions on the general picture that is before us? We are now preparing to go into the individual items, but if you wish to ask questions on the general picture we shall be glad to have you do so.

Mr. FLOOD. No questions.

Mr. SIKES. Very well, let us proceed with the consideration of the individual items.

Ordnance Corps Facilities

Aberdeen Proving Ground, Md.

Colonel Shuler. I shall start with Aberdeen Proving Ground, it being the first station in the technical services book. I shall discuss each item in turn and look to you as to whether you desire more or less detail.

Mr. Sikes. What page are we on?

Colonel Shuler. The page in the big book is 9 and it is page 5 in the family housing book.

Mr. Sikes. I think you can move along quite rapidly in outlining what you have in mind here. I will suggest to the members of the committee that when there are questions you interrupt the witness and ask the questions without any regard to following any particular pattern in passing the witness from one member of the committee to another. Simply interrupt and ask the questions when you have one, and unless interrupted, keep going on the projects.

Colonel Shuler. At Aberdeen Proving Ground we are requesting an appropriation to support four items plus the family housing item.

The first item is expansion of the electrical distribution system, $458,000; replacement of Spesutie Island Bridge, $210,000; one 326-enlisted men barracks, $611,000; and $150,000 to be funded from savings from unused prior authorizations, for a swimming pool.

I will go into each of these items.

SWIMMING POOL

Mr. Sikes. How does it happen that you are using unused authorizations for the swimming pool rather than for one of the other items? Is it because you feel the swimming pool is less likely to get money than one of the other items?

Colonel Shuler. That is not it at all, sir.

Mr. Sikes. That would be a good reason; would it not?

Mr. Foster. That swimming pool, Mr. Chairman, was authorized in the 82d Congress under Public Law 155.

Mr. Sikes. Why did you not build it, then?

Mr. Foster. The committee last year deferred it.

Mr. Sikes. Probably the committee did not see a need for it if it deferred it. What is the reason for its being back here now? What has happened that was not true last year that would justify the committee including the swimming pool now? Do you have a swimming pool at Aberdeen?

Colonel Shuler. We have one at Aberdeen but it is not sufficient for the station strength, and this is another pool to make up for the deficit.

Mr. Sikes. What will happen to the other pool?

Colonel Shuler. It will be fully utilized together with this one to provide the capacity required for the full strength at Aberdeen Proving Ground.

REPROGRAMED SAVINGS

In this appropriation request we are requesting the reprograming of $15,090,000 savings against new authorizations and prior authorizations. Of this amount $4,180,000 is against new authorizations and $10,911,000 is against prior authorizations.

To get back to this item we are talking about, it is 1 item in a list of 6 items. I can read the items if you wish.

Mr. SIKES. Put the list in the record now and we will discuss them as we reach them individually.

(The list referred to is as follows:)

The projects included in the $15,091,000 of reprogramed savings are as follows:

Fort Campbell: 6 enlisted men's barracks (326-man), 1 enlisted men's barracks (263-man)	$4, 180, 000
Aberdeen: Swimming pool with bathhouse	150, 000
Fort Dix:	
Main post exchange	615, 000
Fieldhouse	1, 357, 000
Fort Bragg:	
Bowling center	122, 000
Addition to officers' open mess	217, 000
West Point: Converting riding hall to Academy building	8, 450, 000
Total	15, 091, 000

Mr. SIKES. It is not necessary that you do it now, but you do propose that your testimony will show the full justification for each of these items that you are discussing, the expansion of electrical distribution system, Spesutie Island bridge, enlisted men's barracks, and the swimming pool?

Colonel SHULER. Yes. I will go into each one separately. That is my intention.

Mr. SIKES. All right.

Colonel SHULER. I might point out that we estimate we will save about $20 million from our construction program this fiscal year. I am speaking about fiscal year 1955. This item comes from that $20 million savings. We felt we would rather fund an item from savings than ask new funds for it. It was already authorized, as Mr. Foster brought out, and this is not a new authorization request:

EXPANSION OF ELECTRICAL DISTRIBUTION SYSTEM

Starting with the expansion of electrical distribution system, the project is required to increase the capacity at Aberdeen Proving Ground which is essential to supply imminent load increases represented by more than $5 million of new facilities now under construction or proposed, and to maintain continuity of electrical service to research, testing, and training activities. The present load of 5,200 kilovolt-amperes is being supplied by existing facilities with a capacity of 6,800 kilovolt-amperes. However, when the current scheduled construction is completed on or about the fourth quarter of fiscal year 1955, a load of 11,800 kilovolt-amperes will exist, which exceeds the present capacity by 5,000 kilovolt-amperes. This proposed increase of 7,200 kilovolt-amperes derives from use of standard size power equipment and utilization of existing equipment, and will provide additional capacity for future expansion. Failure to obtain the requested facility will prevent full utilization of the new facilities now under construction due to lack of power. I might add that attempts to carry the future load on the present system will result in interruption of continuity of essential services and cause damage to equipment. This is one of our most important installations in the Ordnance Corps. This request is just bringing the power system up to where it will support the construction, sir.

SPESUTIE ISLAND BRIDGE

The next item is the replacement of the Spesutie Island bridge. The existing bridge was constructed in 1943. The entire structure is of untreated wood with the exception of the pile bents. It has deteriorated to the extent that it has become necessary to impose a load limit of 10 tons, which is only 50 percent of the required loading to meet operational needs. It supports 21 research and development projects on Spesutie Island and if we do not have the bridge we cannot use the investment we have on this island.

Mr. FLOOD. Why in the world would the United States Army Engineers, for whom I have nothing but the highest regard based on their great reputation, build a bridge in Aberdeen, right on the outskirts of the Appropriation Committee's jurisdiction, out of untreated wood and then come back and cry about it?

Colonel SHULER. I can only say it was put up in a great hurry in the war. We wish we could have put up something better, but at that time that is what we put up, sir.

There was a terrific shortage of treated lumber at the time, therefore we put the bridge up to get it in operation.

Mr. SIKES. It has lasted 12 years, which is pretty good for an untreated wood bridge.

Colonel SHULER. Yes, sir.

ENLISTED MEN BARRACKS

The next item is $611,000 for a 326-man barracks, which falls under the $1,700 limit per man, and you will note on page 12 of the big book the figure under the permanent strength column of 2,739 spaces required. That is against the permanent peacetime level which I described previously. We have 263 spaces of permanent barracks existing and we are asking for 326 more, which would only bring us a small percentage toward the 2,739 spaces we need.

Mr. FLOOD. What will these barracks be constructed of?

Colonel SHULER. H-shaped reinforced concrete and masonry building with a 25- to 35-year life.

Mr. FLOOD. No wood?

Colonel SHULER. No; a permanent type construction.

Mr. SIKES. At the present are you having to rely primarily on temporary type construction? I am speaking with particular reference to this station.

Colonel SHULER. Yes, sir.

Mr. FLOOD. Is this a new type and style of design and construction? Will this be the first barracks to be built of this new design and type? How long have you been using this design and so on?

Colonel SHULER. Mr. Flood, through last year we were using as a standard deisgn a 1 company or 263-man barracks.

Mr. FLOOD. How many years were you using that design?

Colonel SHULER. About 5 years. We made a great many studies throughout the field considering all the various strengths of the companies in the Army. They varied from large to small. We tried to envisage a barrakcs we could put two different strength companies in. We settled on this 326-man H-shaped barracks.

Mr. FLOOD. If it is ever necessary to put infantry troops or combat units in those barracks for training, they would be interchangeable?

Colonel SHULER. That is right. They fit the requirements of combat type company strength units.

Mr. FLOOD. So we are not designing barracks for support troops and barracks for combat units?

Colonel SHULER. That is correct, except at a place like Fort Belvoir where, for school purposes, we build a 500-man barracks where we can use a consolidated 500-man mess.

Mr. FLOOD. Did you fellows ever run your eye over the German permanent bases?

Colonel SHULER. Yes.

Mr. FLOOD. Have you ever looked at them?

Colonel SHULER. Yes.

Mr. FLOOD. Pretty nice. Are we near that?

Colonel SHULER. I would say not, sir.

Mr. FLOOD. Why not?

UNIT COST LIMITATION ON BARRACKS

Colonel SHULER. We have a limit of $1,700 per man.

Mr. FLOOD. Why do we have that limit?

Colonel SHULER. As I understand, the Congress put it on.

Mr. FLOOD. When?

Mr. FOSTER. Three years ago. It is embodied in the general provisions of the public works authorizing bill.

Mr. FLOOD. Is there anything sacred about that? As far as you are concerned, I guess there is.

Colonel SHULER. As far as we are concerned there is. The Secretary of Defense can give us a waiver, but in order to get a waiver we have to prove we cannot get it for less.

Mr. FLOOD. Mr. Chairman, here we are again. That gave birth to a new design 3 years ago. Congress, in its collective wisdom, imposed a ceiling of $1,700 per man. And yet we go overseas to these poor downtrodden nations who have been putting pretty good armies in the field for a long time—you can say what you will about Germans, but they are mighty good soldiers. You can say what you will about the Prussian system of training soldiers. Maybe they were kicked around a little bit, but they certainly built magnificent permanent barracks for their troops. I have seen them and you have seen them. Why in the world, if everything that I hear experts tell about the importance of housing for morale for civilians as well as for soldiers is true, if where you live is important, and if we are going to draft men and put them into this thing—and I am for that—why cannot the United States of America build establishments that are the equal of the best permanent establishments built by any nation for their army any place in the world? If ours are equal to that, I am satisfied. But if they are not, and if there is not a better reason for that $1,700 limit, then I think it should be reexamined and the limit removed, and I should like to be assured—I am speaking only on behalf of the Army people—that the next barracks you build for American soldiers shall be the best that can possibly be built without a lot of gingerbread and lace curtains. I do not mean that nonsense, but they should be the equal of the very substantial and inviting barracks I have seen in Germany and other places.

Colonel SHULER. Mr. Flood, let me say a couple things. First, it is a fact the limit of $1,700 per man exists. We are building the barracks to give the men the most we can under that limit.

Mr. FLOOD. Let me interrupt you. That may be. When you say Congress imposed a limit of $1,700 per man to build these barracks, it is my opinion that is what you asked for or what you recommended.

Colonel SHULER. Neither is so, sir. We did not ask for that. We fought it. We asked for about $2,400.

Mr. RILEY. Will the gentleman yield?

Mr. FLOOD. Yes.

Mr. RILEY. Is it not a fact you get pretty good construction for $1,700 per man, and is it not true in certain areas you can get good construction for less than $1,700 per man?

Colonel SHULER. That is true, but they are austerity type barracks. There is no doubt about that.

Mr. FLOOD. May I say to my friend from South Carolina I am sure they will build good barracks for $1,700 per man, but it is not good barracks for $1,700 per man I am talking about. I have seen some of the barracks built in the last 5 years. There is nothing wrong with them. They are good reasonable barracks. But I am looking forward, I hope, to the establishment of a good sized—and I do not mean small, I mean a large—professional army. I am interested in a top flight big, best trained, best dressed, best housed, and what have you, professional army. I would like to see the Army's soldiers live in a better type of permanent establishment. I do not care how good a barracks you can build for $1,700, I do not think it is good enough. It is not what I like, and it is not what I want.

Colonel SHULER. May I say we are presently engaged in working up—I have seen the plans and the study—a barracks which we would like to get Congress to allow us to build which will be considerably above $1,700 per man.

Mr. FLOOD. I agree with you and I am for you.

Colonel SHULER. We cannot present it today.

Mr. FLOOD. I would suggest that you present it as soon as you can. I want something better than what we have now.

Mr. FORD. Can you get a waiver?

Colonel SHULER. We can get a waiver only if the bids show we cannot under the standard design get it constructed at $1,700 a man. I have seen it go to over $2,000 a man, but that is usually to cover high costs in particular areas and not to get better barracks.

Mr. FORD. As I understand, when you include not only the barracks but the utilities, the limit is about $1,868?

Mr. FOSTER. That is correct. The limit of $1,700 was considered to be to the 5-foot line of the building and does not include the utilities.

Colonel SHULER. As Mr. Foster says, it is to the 5-foot line that the $1,700 limitation applies.

Mr. FOSTER. The pending public works bill for 1956 does not repeat these monetary limits that have been repeated for the last 3 years. The reason why the congressional committees included them in the first instance was to make sure there was consistency of quality in the Army, Navy, and Air Force barracks. Mr. Floete, in his presentation this year, has emphasized that he has imposed criteria of quality which makes the limitation unnecessary in law.

Mr. FORD. Is it your interpretation that if this new construction bill goes through as written the $1,700 per man limitation will be repealed?

Mr. FOSTER. That is correct. The main point, however, is that the criteria which have been prescribed by Mr. Floete allow a structural and finish quality of no greater than the $1,700 would allow.

Mr. FLOOD. As far as I am concerned, have him over for lunch, and I will tell him what I think. I am not speaking of luxury-type barracks. I have never seen a luxury-type barracks and do not know what anybody means by luxury-type barracks anyplace in the world. The idea of some broken-down old-time Army buck sergeant trying to make a speech about "We are playing fancy with our troops" in my book is plain nonsense. I have not time for that kind of talk, and I am not making this statement to have somebody pick it up and draw cartoons or make snide remarks about what king of barracks Flood wants for the soldiers. At the same time, I do not like the word "austere." I do not think the barracks should be austerity barracks, nor should they be luxury barracks, but they should be somewhere between the two and that is not the kind of barracks you are getting now.

Colonel SHULER. I can state for the Department of the Army we desire better barracks than these for the soldiers, and we have plans for barracks that will cost between $2,000 and $3,000 a man.

Mr. SIKES. This is a very important thing that is being discussed. I would like you to bring out clearly whether you have suffered under the restriction that has been placed upon you. Have you been limited in your desire to provide satisfactory and comfortable quarters for the men under the $1,700 limitation?

Colonel SHULER. I think we have.

Mr. SIKES. Why have you not requested that it be removed?

Mr. FOSTER. It has been requested of the Armed Services Committee the last 2 years.

Mr. SIKES. And they have taken no action?

Mr. FOSTER. This year I believe they will remove the language. It is not in the bill reported by the House Armed Services Committee. The Senate committee has not acted but they seemed sympathetic to Mr. Floete's presentation.

UTILIZATION OF EXISTING BARRACKS

Mr. SIKES. You propose to phase out temporary-type barracks when the new ones are completed?

Colonel SHULER. We intend to phase out this design.

Mr. SIKES. I am talking about the barracks now in use at Aberdeen.

Colonel SHULER. Yes. We would remove troops from the temporary barracks to these.

Mr. SIKES. What would you do with the temporary barracks?

Mr. FLOOD. There is no reason why the Army should lower its standards. I hope they will raise them. So far as training the troops is concerned, I hope they give them the toughest kind of training that is reasonable. I do not want any Casper Milquetoast sort of training. I hold no brief for people who cry about "You are making it too tough for the boys." This is no boys' game. But when they come back from maneuvers and when they come back from the field I want them to go to permanent barracks that are considerably better than austere.

Colonel SHULER. I believe the Army would agree with you 100 percent.

Mr. RILEY. Mr. Chairman, when this matter first came up—and I agree with Mr. Flood we should have comfortable quarters for our Army personnel—this committee, through its subcommittee, recommended stopping these temporary barracks built out of cheap construction because the maintenance of them was something terrific. We recommended, I believe you will find, that masonry construction, wherever it was practical, be used. And of course this Appropriations Committee was not responsible for the $1,700 limitation, I do not believe, although some of our recommendations may have carried some weight. The reason, as I understand it, for that limitation was that on various posts the design and construction varied so that this committee felt there should be some uniformity. We did not think one post should be head and shoulders above another in facilities. If a man were transferred from the Pacific coast to the Atlantic coast, we felt he should expect pretty much the same facilities he had left.

Colonel SHULER. I agree, sir.

MESSING FACILITIES

Mr. RILEY. I do not believe these barracks include messing facilities?

Colonel SHULER. Yes, they do.

Mr. RILEY. These 326-man barracks include messing facilities?

Colonel SHULER. Yes. They are two-company messing facilities.

Mr. RILEY. That was another question. Some of the barracks had messing facilities and others had simply living quarters. That was a disparity to a certain extent. The men had to go to the messing quarters to get their meals and then go back to the living quarters barracks to rest. I am glad to know you put them together. I think that is much more practical.

STANDARDIZATION OF DESIGN

Another question that arose was that the different services had different type barracks. Why should a man in one service have different quarters from a man in another service? This present setup came about in trying to get some uniformity. The Army first thought there should be standard plans, and after a study was made the criteria theory was brought out which I think is better because you cannot get the same construction identically in various parts of the country. The construction varies. But you can get approximately the same space per man and the same facilities and things of that nature. Certainly you need better insulated buildings in the North than in the South, and that sort of thing. And so this criteria theory I think is the way to solve the problem. The $1,700 is an average, as I understand.

Colonel SHULER. No sir; it is a maximum limit. It should be an average. There are some areas where we do not have to provide as costly items as we do in the cold climates.

Mr. RILEY. I think the price limitation should be an average. For that reason I like the criteria approach better than the limitation approach.

Colonel SHULER. I am all for that, too, but this does put us right up against the limit in those climates where it is very costly to install heating plants. It gives us a better barracks where it is cheaper to build barracks.

Mr. RILEY. I am in thorough accord with that also.

Colonel SHULER. I would like to point out one thing, and I hope I have not given this committee the wrong impression on this; these are not bad barracks, but they are not as good as we think they ought to be, and if we could get a removal of this limitation and be allowed to build a little better barracks, we believe the Army would be much better off on the barracks program.

Mr. RILEY. I have seen some pretty good barracks out of this construction. They may need a little refinement.

Colonel SHULER. They are much better than they used to be.

DESIRED IMPROVEMENTS OVER PRESENT STANDARDS

Mr. RILEY. What, in general, do you desire in barracks that you cannot now provide?

Colonel SHULER. I will ask Mr. Zackrison from the Office of the Chief of Engineers to talk on Mr. Riley's question as to what additional items we desire in barracks which we cannot now provide.

Mr. ZACKRISON. First of all, we would like to get a little more rugged construction into the barracks. At the present time we are having some difficulties, for instance, with the windows. The boys that are not accustomed to gentle treatment are apt to break the windows when they slam them in closing. The toilet fixtures are of medium quality; they are not quite as substantial as they might be from the standpoint of pulling out from the walls. We would like to heavy that up.

We would like to put some interior finish in some of the squad rooms and in some of the individual rooms.

At the present time they are of exposed, concrete block masonry; the toilet piping is exposed, with the result that it creates noise; in other words, when the toilet above is used, you can hear the water coming down when flushed. We need to do something about enclosing the piping.

The finishing on the floors is not all that could be desired. We have exposed troweled concrete. We would prefer to have at least asphalt tile floor covering.

Mr. RILEY. I think that one of the biggest drawbacks is the present floor finish, and the walls in the kitchens and mess halls, you cannot keep a cement floor or rough wall clean unless you can have it so they can be wiped down.

Mr. ZACKRISON. We would like plaster or dry-wall construction which would make it much easier to clean, or perhaps put more tiling in the kitchen, which would make it still easier to clean.

We would like also to provide, certainly in the southern climates, what we formerly called media aquas or awnings which would project about 2½ to 3 feet out from the wall making it possible to keep the water out when it rained, give greater ventilation and at the same time provide greater protection to the windows.

Mr. RILEY. And also provide better protection to the walls.

Mr. ZACKRISON. And better protection to the walls. A feature like that, however, would cost about $50 per man.

Mr. RILEY. I do not think that it should be restricted to the South, either.

Mr. ZACKRISON. It is desirable elsewhere, too.

Mr. RILEY. You have a lot of weather in the North where that same protection would be helpful.

Mr. ZACKRISON. The further south you go, the more protection you get from such a feature. You get not only protection from this provision for your walls but from the cooling effect from the sun. And certainly it is well worthwhile.

We would also like to get a little improvement in appearance. Frankly, our present construction is substantial but it looks somewhat like factory construction.

When we attempted to impose that same type of construction on the armory program, practically every city in the country resented it.

Mr. FLOOD. Except the one they did on the armory at Wilkes-Barre, Pa., where they took $15,000 and made a crossroad garage front on it, because someone out at the Pentagon looking for stripes says, I will save $12,000 plus a lot of other things.

It is a good example. Here we have a $15 million veterans' hospital and we have the city and the community which have gone to some expense to dress up the entire area to make a Federal concept out of it with enough money that the community put in there, as an invitation or as an expression of gratitude toward the Army for putting the building there. And after all that is done, someone takes the few odds and ends off, which would make it an attractive building, and we are going to dedicate it on July 8 and I am disappointed with its appearance.

That is the kind of thing I mean.

Now, that is not economy under any circumstances.

Mr. RILEY. If the gentleman will yield, with regard to that, somer of the services—and I will not mention them by name, went too fat in decorating their buildings, which ran up to a considerable amount of money, resulting in monuments to the architects and the designers. But I am in agreement with my friend thoroughly, that there is a happy medium where you can get a building that looks good and is good without putting all of these decorations on it.

Mr. FLOOD. I do not want it to look like this old State Department building down here at the corner of Pennsylvania Avenue and 17th Street. Those are architectural atrocities; that long decade of rococo gingerbread, nobody wants any part of that. So do not come up with one of those brain children and try to conform to that idea either, but you know what Mr. Riley means and you know what I mean. We are not getting it, and I do not know whose fault it is.

And another thing, we have been told for the past 2 weeks—we have been talking about this military construction bill and Mr. Whitten of Mississippi has particularly been pressing it; he has been saying at the Secretary level and at the Chief of Staff level: Gentlemen, where are we getting on the permanent appropriation; when are we going to reach a level? Where is the plateau? How many years ahead? How many billion dollars?

And they have all been telling him: Well, now, we are beginning to see daylight. We are getting near the end of the line now, and we are beginning to see that in a few years, we will be leveling off.

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These are permanent installations. This is to be the permanent Army at the permanent bases. Now, I see no reason why there must be, or why there should be, canned, stylized design.

If I go down with Congressman Sikes to Eglin Air Force Base, I would expect to see the barracks and the officers quarters on a big permanent establishment, designed and colored and modeled to fit the accepted decor, and to have the advantages for that climate, and in that kind of country.

I see no reason why a barracks for a Florida base or a Texas base, or a California base, or in the tropics or some semitropical area for a permanent base—that is, why the buildings cannot be so esthetically designed, at no great cost, so as to fit in the community and in the entire area, and the public concept, and the soldiers' concept, of the kind of country he is living in, both in windows and air, and color and design. From the minute you drive into that base, I do not see why an air base or an Army base, no matter where it is located, should look like some school for delinquent children, with a lot of bricks stuck up in the middle of a sandbar. Or why it should smell like some county prison when you walk into it.

We are talking about the permanent Army, years ahead, of a big professional establishment. These are to be buildings for the permanent bases, and the landscaping and the approaches and the whole operation should be in as good taste, should be as intelligent, should be as reasonable, and should be equally attractive, and the design should be identified and indigenous to the area where the base is located, and there is no reason why not.

I cannot agree with the canned, predigested design, created by some New York engineering firm, under a contract with the Army, who will turn out design A, and that is going to be the barracks. And they are going to build that kind of building from Maine to Florida and from Texas to Oregon. There is no reason for it at all. It is bad planning, and it is bad judgment. Any congressional committee or any general or secretary who puts it up is wrong in my judgment. We are talking about the permanent United States Army, in years to to come, and great permanent bases. Now is the time to begin to do it. And if we do not begin now, we are going to be derelict again. I think it is a shame that once and for all, after 170 years, we cannot do this thing properly, in conformity with what I think the average American believes.

Colonel SHULER. Mr. Chairman, may I just say one further thing: This standard design was not imposed on the Army by the Army. This stems from the efforts which Mr. Riley referred to, the pressure to standardize, within the three services, and of course that has filtered down to the establishment of standardized criteria, and a certain amount of standardization in structure. I too, would like to see different types of structures built throughout the Army but there is the other side of the question; that is, you must have some control in the form of standardization.

Mr. FLOOD. The rule of reason will apply to anything, particularly this. That is no defense. Do not run behind that and say you can't do it; I know all of that. That is just a waste of words to say that it should not be this way; everybody knows what it should not be. But nobody seems to understand what it should be, and does not want to talk about what it should be. Regimentation and standardization

within the military forces is an essential and conditioned precedent to discipline and training. Of course that is so. But when it comes to the structures of this kind, on a permanent basis, then that is the point where we could leave the rigidity of discipline and standardization. As far as the rule of reason—at that point—as far as the rule of reason and dollars will permit. But I am not satisfied that the subject is being handled properly and I see no indication that it is going to be handled properly, and I am against it; that is all.

Mr. SIKES. Mr. Zackrison, did you have some other points?

Mr. ZACKRISON. I have a few more points, Mr. Chairman.

We would like also to reduce the size of our squadrooms, sir. At the present time, they are largely for 24 men, and it is desirable to have smaller squadrooms and to provide for more privacy.

We would like to provide a greater amount of mechanical ventilation in the South and, in some areas, air conditioning. There are some areas where it is just too hot to live.

Mr. FLOOD. Let me interrupt you right there, to say that air conditioning should not be restricted to the South.

Mr. ZACKRISON. No.

Mr. FLOOD. If you will come up into Pennsylvania in the middle of July and August—well, I would rather be down in Miami, so when you are talking about construction, do not forget that the troops living in some of these northern areas, in July and August, where it is extremely hot, it is in the high 90's all this week—96 to 98°.

Mr. ZACKRISON. And apropos my earlier comment, I might say we are very much in favor of providing in some areas, structures that more nearly conform in appearance to the permanent structures on the post, the postwar permanent structures. We would also like to provide more conveniences, such as ramps, basements, and storage space. It is extremely desirable to provide some additional basement space for various purposes, storage, and otherwise.

These are only indicative of the types of improvements we want. Many of them are to reduce maintenance; many of them are to improve livability, and to increase the morale of those occupying these spaces. We feel that there is a very large and definite room in some areas in which improvements should be sought.

Colonel SHULER. If we do all of these things that Mr. Zackrison has referred to, it is going to run our cost per man well above the $1,700.

Mr. ZACKRISON. At the present time, they will run in excess of $2,500 per man, average.

USE OF COLORED PAINTS

Mr. FLOOD. Let me ask you: Are you getting any color into these garagelike buildings you are putting up around here? I came through a Signal Corps installation not long ago, a big one, a very, very attractive place, and the commanding officer went to some pains—he was very proud of how they were getting the different pastel shades. Now, 10 or 20 years ago if an Army colonel talked about putting pastel shades into a building, they would shake him down and put him in a hamper. But this is an old buck Army colonel, a tough character, and very, very pleased to show me how he is going to try to get different pastel colors on the walls and on the ceilings, in these places where these men are living. What is the matter with that? Is that only for sissies, or what?

Colonel SHULER. The Air Force does it, Mr. Flood?

Mr. FLOOD. Oh, sure, so does the Navy.

Mr. ZACKRISON. We have just completed a study on that subject, and transmitted our findings to the very folks who suggested that; we do painting in pastel colors and that sort of thing.

Mr. FLOOD. You know, here again, we started out these hearings in January and I complained about this business of the Army getting the dirty end. It is the fault of the Army's thinking. You think you are low down on the totem pole, that you are going to be beat over the head, and that you do not amount to anything, that they are cutting your ears off, and you are beginning to think that way.

The Air Force does not think that way. They think they are hot shots. And they get a lot of these things because that is the thinking, from the top to the bottom, in the Air Force. The Navy is the same way. They think they are the hottest outfit in the world. So do the Marines. Did you ever talk to a marine—but the Army thinking is that they have got you over a barrel they have got you psychologically handicapped, and you do not open your mouth; you do not squawk, you take what anybody throws you. What is the matter? Are you beginning to think about these things? Why don't you fight back and see that the Army takes care of its own?

Colonel SHULER. I do not agree, Mr. Flood.

Mr. FLOOD. I do not care whether you do or not, or disagree; I hope you do disagree.

Mr. RILEY. Mr. Chairman, the reason that colors are beginning to come into use now, is because they have developed waterproof bondings that they did not have a few years back. Of course that makes the difference. In the Army they are just now beginning to take advantage of these improved materials.

Mr. FLOOD. Oh, surely.

Mr. ZACKRISON. We did not have these findings, these current findings until very recently, and as a result of these studies, we are obtaining more of these paints now.

Mr. FLOOD. This falls under recruiting and realistically so.

Mr. ZACKRISON. I would estimate that we have had these barracks painted for more than 9 months.

Mr. SIKES. I think perhaps we had better get back on the subject matter you were discussing.

UNIT COST LIMITATION ON BARRACKS

Mr. FORD. Just before you leave that, Colonel, when was this $1,700 limitation imposed?

Mr. FOSTER. It was first imposed, Mr. Ford, in 1952.

Mr. FORD. In the military construction bill for fiscal year 1953?

Mr. FOSTER. That is right.

ENGINEERING COST INDEX

Mr. FORD. Has the engineering cost index advanced or changed since that time?

Mr. ZACKRISON. It is approximately 7 percent up.

Mr. FORD. You say it is approximately 7 percent?

Mr. ZACKRISON. Yes.

Colonel SHULER. I might say, Mr. Chairman, that for about a year now we have been getting very favorable competition from the contractors. I think you will find that pretty well offsets the increase in the engineering cost index.

Mr. SIKES. In other words, it costs just about as much now as it did then?

Mr. ZACKRISON. It is still a little bit more, depending upon the quantity. In other words, where we have a great number of barracks, we are getting much better bidding than we did 4 years ago.

Mr. RILEY. Where you can employ the latest machinery along with the construction, it makes quite a difference.

Mr. ZACKRISON. Where you have small business, the cost is perhaps more than 7 percent.

Mr. RILEY. For the overall, it evens out?

Colonel SHULER. It is just about even.

Mr. ZACKRISON. Right now, I might say that our bids have been much better, perhaps better than they are going to be 2 or 3 months hence, because the construction market is tightening up, with more construction. The contractors have been fairly hungry up until now.

(The following additional information was furnished for the record:)

For the record, the Engineering News Record cost index as published September 1, 1952, reflecting costs existing at the time the limitation was imposed, was 424.4. This same index as of June 1, 1955, was 464.8. The increase in costs indicated by this index is 9.5 percent rather than the 7 percent quoted above.

Colonel SHULER. May I answer the question you asked me a while ago, Mr. Sikes?

Mr. SIKES. Certainly.

UTILIZATION OF EXISTING BARRACKS

Colonel SHULER. It was about 10 minutes ago. You asked me what would be done with the existing barracks.

Mr. SIKES. Yes.

Colonel SHULER. The existing mobilization-type barracks would be vacated and repaired and used for ROTC summer training. We do have a need for these barracks after the new permanent barracks are completed. We would either put them on mobilization standby, with the very minimum of maintenance—or if some are too badly deteriorated, we would destroy them.

Mr. SIKES. Do you have the money for the repairs?

Colonel SHULER. Yes.

Mr. SIKES. And maintenance?

Colonel SHULER. Yes, money other than MCA.

Mr. FORD. One further question, Mr. Chairman.

I was down at Fort Lee a few weeks ago, and I saw barracks which I believe had been recently constructed. Are those the type that you are talking about here?

Mr. FOSTER. Some of them.

Colonel SHULER. Those are the 263-man barracks, I believe, instead of 326. Although we have a number of the 326-man barracks in this program, we have none completed as yet.

Mr. FORD. But the appearance and the type is the same?

Colonel SHULER. Yes.

Mr. FORD. They are reasonably identical?

Colonel SHULER. That is right.

Mr. SIKES. Where is the nearest place that the committee might see some of the type of barracks that you are talking about?

Mr. ZACKRISON. Fort Meade would be about the best place.

Mr. SIKES. Do you have any of the 326-man barracks there?

Mr. FOSTER. Not under construction.

Mr. SIKES. Where would be the closest 326-man barracks?

Mr. FOSTER. We have none. We have some open bids on barracks of that kind, but have none constructed.

I think we might have in the record, Mr. Chairman, that the difference between the 263-man barracks that have been constructed and the 326, is basically one of floor area only. Structurally, finishwise, and qualitywise, they are identical.

Mr. MILLER. Is there not a big difference in your utilization? Did they not tell us the other day that the 326-man barracks is the kind that would handle two organizations?

Colonel SHULER. Two companies.

Mr. MILLER. In other words, you would have to have two sets of orderly rooms and all that sort of thing?

Colonel SHULER. Each company has unit integrity——

Mr. MILLER. I mean, you have got really an entirely different setup because one is a single unit and the other is a double. I think what the chairman is interested in, and I know I am, is that we would like to see one of these so-called dual-unit buildings, which I understand is your last word. That will be what you desire to build in the future.

Colonel SHULER. I understand that we have none yet under construction.

Mr. MILLER. I assume that all of the committee has seen the kind that we usually find, and if we went to Fort Meade, or any of these other places, we would see the same thing, so there is no need of going out there to see something which we have seen so many times.

SWIMMING POOL

Mr. SIKES. Will you take up the next item, Colonel Shuler?

Colonel SHULER. Mr. Chairman, the next item is the swimming pool for the Aberdeen Proving Grounds. We are asking for a pool 63 feet by 82 feet, with a gross area of 5,177 square feet, and a bathhouse, with the total amount of money, $150,000.

The size of the pool is based on the allowance in Army Regulations 415–31 for a swimming pool for the strength at the Aberdeen Proving Ground.

I passed out copies of AR 415–31 to the members of the committee.

Page 9 of the justification book shows there is a present strength of 1,483 officers and 8,935 enlisted men; and there are 5,829 civilians in addition, for a total of 16,247.

Mr. FORD. This is all weather pool, exclusively for the personnel strength?

Colonel SHULER. Yes.

Mr. FOSTER. This is an outdoor pool.

Mr. RILEY. Colonel, how many pools do you have at Aberdeen barracks?

Colonel SHULER. We have one of 5,000 square feet and this would give us a total of a little over 10,000 square feet. It comes within the allowances of our criteria.

Mr. RILEY. Has the personnel at the Aberdeen barracks been increased over the past several years?

Colonel SHULER. For the past several years?

Mr. RILEY. Yes.

Colonel SHULER. Mr. Van Kuren, can you answer that?

Mr. VAN KUREN. The personnel increased very substantially up to the time of the Korean emergency.

Colonel SHULER. What about the past several years?

Mr. VAN KUREN. After the first increments, there has been no substantial increase.

Mr. MILLER. It would not be higher than it was during World War II?

Colonel SHULER. During World War II there were 30,000.

Mr. RILEY. I know in the report last year, the committee said that the swimming facilities existing at the Aberdeen Proving were sufficient, and therefore the committee had decided not to ask for additional pools at this installation. I want to establish just why another pool is needed and why it is being recommended at this time. Evidently last year the committee was not convinced that there was a need.

Colonel SHULER. The only thing I can say, Mr. Riley, is that we have a criteria established in the Army which allows this additional swimming pool to fit the needs of the total number of people at the Aberdeen Proving Grounds. Do you know specifically as to last year, Mr. Foster?

Mr. FOSTER. I can only surmise, Mr. Riley, because there was not a great deal of discussion of the project in the record of the hearings, that the committee did not necessarily concur in the criteria. However, these criteria for recreational welfare facilities have now been adopted by the Secretary of Defense and are applicable to all of the three services.

Mr. RILEY. What was the actual experience as to the use of the swimming pool? Do you know whether it was crowded or not, or whether there was a demand there in excess of the facilities?

Mr. FOSTER. Could I add this clarifying point——

Mr. FLOOD. I think you ought to know that our friend from South Carolina, Mr. Riley, is most expert on this question of recreation, so be sure you know what you are talking about. I just want to tip you off here.

Mr. FOSTER. Thank you, sir.

Mr. FLOOD. He is an authority on these things.

Mr. RILEY. I cannot plead guilty to that. I do know something about them.

Mr. FOSTER. In the Army construction budget last year, we had about 6 or 7 million dollars worth of items in this category, most of which were approved by the committee, but there were some 5 line items which the committee in their report denied. Candidly, sir; I went back through the testimony to see if I could see wherein we had failed to make a proper presentation, and there was not enough said at the time to distinguish between these and the projects which were approved. Therefore, we decided that we would come back and

present it to the committee again and perhaps present all the facts in their true light.

Mr. RILEY. I should like to have a little testimony as to the usefulness of this swimming pool.

Colonel SHULER. We can get that for you.

Mr. RILEY. In view of the committee's action last year.

Colonel SHULER. We will be very glad to give you the background for this, Mr. Chairman.

I would like to say this, that I have been stationed at a number of posts in my short 19 years in the Army, and I have failed to see any swimming pool at a post where there are 16,000 people that is not used during good weather all the time. Of course 16,000 makes up a lot of people. But we will send you the exact statistics with reference to this.

Mr. RILEY. In view of the stand taken by the committee last year, I think we ought to have pretty full testimony on this point. Personally, I am very favorable; I think it is one of the finest exercises and one of the best recreational facilities that we can have, particularly in the warmer months.

Mr. FLOOD. I agree with that. I like a swimming pool myself, and I do not work as hard as those fellows, but I can't imagine anything nicer, after a tough day, than to go out and bang into a swimming pool.

Mr. RILEY. If you can keep the boys in the base, instead of their having to get their recreation some other place, I think it is very fine.

(The information requested is as follows:)

Army Regulation 415–31, dated November 29, 1954, provides that an installation the size of Aberdeen Proving Ground is authorized a maximum of two swimming pools. One 50- by 100-foot pool is in existence at the installation; a firm requirement exists for a standard pool 63 by 82 feet. The latter, a regulation pool, would be available not only for recreational swimming, but also for swimming programs such as meets and tournaments. This installation has not been able to develop a swimming program because of lack of a regulation pool, and this project would provide a much needed facility for a post swimming program.

Participation records for the existing pool reveal that 18,552 people utilized the facility in 1953, and 22,535 in 1954, for an average of 6,844.5 for each month during the 2 summer seasons. It is the policy of the proving ground to limit the pool to 100 participants at any one time. This policy is based upon appropriate safety regulations. This limitation necessitates a turnaway on warm days of from 75 to 120 people. Many enlisted men and their families have not used this pool because of the overcrowded condition which forced them to seek other off-post pools for recreational purposes.

Experience thus far during the 1955 season reveals that the pool is even more crowded than it was a year ago, and more and more questions are being raised by enlisted personnel as to the possibility of a second pool to alleviate the situation.

Opportunities for swimming near the proving ground are aggravated due to the pollution of Chesapeake Bay waters adjacent to the reservation. The surgeon, Aberdeen Proving Ground, has run frequent sanitation tests during the past several seasons, including the summer of 1955, and such tests consistently show the bay waters to be class D (highly contaminated), thereby causing swimming from reservation beach areas to be prohibited. Thus, and additional swimming pool is mandatory for adequate summer recreation at the Aberdeen Proving Ground.

Mr. RILEY. Off the record.

(Off the record discussion.)

Family Housing

Colonel Shuler. Mr. Chairman, at this time we come to the first request for family quarters, and if I may have your permission, I would like to place in the record some data which I believe will go a long way toward answering many of the questions on family housing.

Mr. Sikes. Very well.

Colonel Shuler. This statement concerns specifically the 36 sets of noncommissioned officers' quarters which we are requesting at the Aberdeen Proving Grounds and the entire family housing program. For the most part, the current proposed housing program has been designed for noncommissioned officers and junior grade officers. The noncommissioned officer housing is predicated upon a maximum area of 1,080 square feet, and the junior grade officer quarters upon a maximum of 1,250 square feet, with an average of all housing not to exceed 1,080 square feet. On an armywide basis, it is the objective to provide 1 bedroom in 20 percent of the total number of units, 2 bedrooms in 50 percent of the total number, and 3 bedrooms in 30 percent of the total number.

It is aimed at providing not less than 750 square feet per unit for 1-bedroom units, not less than 950 square feet for 2-bedroom units, and not less than 1,080 square feet for 3-bedroom units, for noncommissioned officers. The quarters for the junior grade officers are increased in size in proportion to the additional funds permitted, that is, $11,040 to the 5-foot line, as against $10,040 to the 5-foot line for noncommissioned officers quarters.

Mr. Miller. May I interrupt for a question to clarify something in my own mind?

Colonel Shuler. Yes.

Mr. Miller. What do you mean when you refer to the 5-foot line?

Colonel Shuler. Sir, for purposes of dividing the outside utilities from the plumbing and the wiring that go into the quarters, we draw a line of say 5 feet out from the perimeter of the house. We say the outside utilities for the building go from that line out. The inside utilities are those within the 5-foot line. These costs for family quarters include work out to the 5-foot line but do not include outside utilities.

Mr. Miller. Thank you.

Colonel Shuler. The designs as developed for Fort Lewis, Wash., within the above limitations have resulted in room sizes as follows—and Mr. Chairman, I will submit this for the record, unless you want me to read it, but I thought you ought to know all of the room sizes, in the record.

Mr. Sikes. Yes; just insert it in the record.

(The information requested is as follows:)

For the most part the current proposed housing program has been designed for noncommissioned officers and junior grade officers. The NCO housing is predicated upon a maximum area of 1,080 square feet and the junior grade officers' quarters upon a maximum of 1,250 square feet, with an average of all housing not to exceed 1,080 square feet. On an armywide basis, it is the objective to provide 1 bedroom in 20 percent of the total number of units, 2 bedrooms in 50 percent of the total number, and 3 bedrooms in 30 percent of the total number.

We have aimed at providing not less than 750 square feet per unit for 1-bedroom units, not less than 950 square feet for 2-bedroom units, and not less than 1,080 square feet for 3-bedroom units for noncommissioned officers. The quarters for the junior grade officers are increased in size in proportion to the additional funds

permitted, $11,040 to the 5-foot line as against $10,040 to the 5-foot line for NCO quarters. The designs as developed for Fort Lewis, Wash., within the above limitations have resulted in room size as follows:

OFFICERS'

	2-story, 2-bedroom	2-story, 3-bedroom
Living room	19 feet 8 inches by 12 feet 1 inch	19 feet 8 inches by 12 feet 1 inch.
Dining room	7 feet 4 inches by 10 feet 5 inches	11 feet 6 inches by 9 feet 3¾ inches.
Combined kitchen and utility room.	8 feet 4 inches by 15 feet 7 inches	8 feet 2 inches by 15 feet 7 inches.
1st bedroom	12 feet 10½ inches by 12 feet 2 inches.	12 feet 2 inches by 12 feet 2¼ inches.
2d bedroom	11 feet 4½ inches by 15 feet 2 inches	15 feet 2 inches by 11 feet 4½ inches
3d bedroom		12 feet 10 inches by 12 feet 2½ inches.

NONCOMMISSIONED OFFICERS'

Living room	12 feet 1 inch by 16 feet 3 inches	19 feet 8 inches by 12 feet 1 inch.
Dining room	7 feet 4 inches by 9 feet 8 inches	7 feet 4 inches by 9 feet 9 inches.
Combined kitchen and utility room.	8 feet 4¼ inches by 15 feet 7 inches	8 feet 4¼ inches by 15 feet 7 inches.
1st bedroom	12 feet 2½ inches by 12 feet 3 inches	12 feet 2 inches by 11 feet.
2d bedroom	10 feet 8 inches by 15 feet 2 inches	9 feet 2½ inches by 12 feet.
3d bedroom	do	10 feet by 8 feet 6 inches.

Plans for housing have been prepared for each of five geographical areas; namely, Northeast, Southeast, Middle West, Southwest, and Northwest. Each of the plans developed for these areas conforms to the basic criteria and general plan although modified to fit each of the general climatic conditions and type of construction indigenous to that area. For specific sites, each of these plans is site adapted for the soil conditions, terrain, local availability of fuel, temperature zone, and sometimes, local availability of materials. In order to reduce costs, particularly of utilities, there are generally multiple units or row houses, built in units of 4, 6, and 8, with the 8-unit structures prevailing in numbers. However, in desert or semidesert areas, where more open living is a requirement, as at Fort Hood, quarters are being designed in individual and duplex houses. The type of construction is generally masonry-unit wall construction; concrete-floor slabs on grade with either asphalt-tile floors, or wood flooring where funds permit; plastered or dry-wall construction; sound-absorptive partitions between units; flat or pitched roofs, although generally flat; individual, forced warm air heating systems generally, with either gas or oil depending on local availability. For the multiple-unit developments, off-street automobile parking is provided on the basis of one space for each unit by the widening of the street in front of the house or adjacent thereto sufficiently to accommodate straight-in or diagonal parking. Where through traffic is a factor, off-street parking is provided entirely by courts separated from the traffic way. The width of the streets where through traffic is not a factor is generally 20 to 22 feet.

Areas in which row houses are used are being developed on the basis of eight units per net acre, exclusive of streets, parallel utility strips and sidewalks, community recreational areas, and unusable or undeveloped areas.

Typical of the quarters so far developed are those at Fort Belvoir, Va., where the junior grade officers' 2-bedroom units have 1,080 square feet net area, and 3-bedroom units have 1,238 square feet. The NCO 2-bedroom units have 900 square feet and the 3-bedroom units have 1,041 square feet plus an allowance for each of these quarters of 50 square feet for storage and utility area, required in lieu of the basement.

The officer quarters at Fort Lewis, Wash., are being built at an average of 870 square feet for 1-bedroom units, 1,048 square feet for 2-bedroom units, and 1,250 square feet for 3-bedroom units. The area for the NCO quarters at this same station is 750 square feet for 1-bedroom units, 1,020 square feet for 2-bedroom units, and 1,080 square feet for 3-bedroom units. All the quarters at Fort Lewis, Wash., are being constructed at an average cost of $9,815 per unit ($10.04 per square foot) exclusive of ranges, refrigerators, and telephones. Cost, including ranges, telephones, and utilities, is $11,855 per unit ($12.12 per square foot). The pricing experienced at Fort Lewis is considered unusually favorable inasmuch as many of the roads and utilities are already in place, the gravel soil is unusually good foundation material, the climatic condition for construction and design is

very mild, thus permitting construction generally without interruption. In addition, the number of units (800) permitted mass production and minimum contractor mobilization costs. Such extremely large projects attract unusual competition as is evidenced by the fact that the two low bidders on this project came all the way from the State of Texas. There were 16 bidders.

Bids received only this past week for Fort Belvoir were also unusually favorable and resulted in an average cost of $10,197 per unit ($9.53 per square foot), exclusive of utilities, ranges, refrigerators, and telephones. Cost including utilities, ranges and telephones was $12,553 per unit ($11.73 per square foot).

Colonel SHULER. Plans for housing have been prepared for each of five geographical areas, namely, Northeast, Southeast, Middle West, Southwest, and Northwest. Each of the plans developed for these areas conforms to the basic criteria and general plan although modified to fit each of the general climatic conditions and type of construction indigenous to that area. For specific sites, each of these plans is site adapted for the soil conditions, terrain, local availability of fuel, temperature zone, and sometimes local availability of materials.

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The pricing experienced at Fort Lewis is considered unusually favorable inasmuch as many of the roads and utilities are already in place, the gravel soil is an unusually good foundation material, the climatic condition for construction and design is very mild, permitting construction generally without interruption. In addition, the number of units involved, 800 as I said before, permitted mass production and minimum relative contractor mobilization costs. Such extremely large projects attract unusual competition as is evidenced by the fact that the two low bidders on this project came all the way from the State of Texas to Fort Lewis, Wash.

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Cost including utilities, ranges, and telephones, was $12,553 per unit, or $11.73 per square foot.

We have found, sir, from our experience that the only jobs that we have been unable to award under the present space and cost limitation that the Congress has placed on our family housing program, are for 4 of our smaller jobs, where the largest number of units was 30, and I believe 20 in another, 3 in another, and about 5 in another.

Where we have 200 or 300, or 800 houses to award, we have received favorable bids. We feel that we have a satisfactory durable set of quarters. As I said, the bulk of the program is comprised of junior-grade officers and noncommissioned officers quarters.

Mr. FLOOD. Let me ask you this: Is there any place in your record having to do with the preliminary acquisition of data for these designs and plans, where you would have any information or any memorandum, any place in your file or anybody else's file, that would identify this program, where an attempt was made to tackle and get the opinion of the junior officers and their wives as to what might be a good idea to have in this thing, or are you just simply saying this is what we think would be good for the junior officers and their wives?

Colonel SHULER. No, sir. This program, I believe, comes closest to following the principle that you have outlined for building in the Army. This is done——

Mr. FLOOD. But that does not answer my question. My question was: Is there any evidence anyplace where an attempt was made to get a cross-section opinion of the junior officers and their wives, nationwide, as to what they think, or they would like, the average junior officer married, what would Mary and Goerge like to have in the junior officers quarters? We are going to spend X dozens of millions of dollars building junior officers' quarters. What do Mary and Goerge, Lieutenant George and Mary, think? Did anybody ever consider the potential there?

Colonel SHULER. I believe the answer to that question, as I have stated, Mr. Flood, is "No."

Mr. FLOOD. I was afraid of that.

Colonel SHULER. But I would like to point out that this is not a standard design in any sense. This is done on a geographical basis by

different architectural engineers, by different district engineers, to try to build houses that will fit the community.

Mr. SIKES. Let me ask you this question: Does the architectural engineer have the right to follow his own ideas that he has gained from contact with other customers in developing your plans, or do you give him a preconceived set of ideas that you want incorporated into these houses?

Colonel SHULER. Sir, he is allowed to do the former, Mr. Chairman, and, in addition to that, we only select architect engineers who have had a great deal of experience in dealing with housing design. That, I believe, is a partial answer to Mr. Flood's question.

Mr. FLOOD. I don't consider that an answer at all. I just think how nice it would have been, how astounded the junior officers and their wives would have been, if somebody, some place, would have sent out one of your many, many memorandum forms and said, "Now, here is a little surprise; we are going to enter into a housing program, and before signing up contracts with architects, or engineers, for the houses that are going to be built at the base—maybe you will not be there, you will be some other place—but we would like to get your thinking, and the thinking of your people and their experiences, in your conversation, do you have any idea as to what we should put into these houses, so we can get them into the design of these houses." Now, of course you would get a lot of strange ideas; there is no question about that. But, again, I appeal to the rule of reason, I am satisfied that it would have done a lot of good.

General LAWTON. In connection with the Wherry housing design, we did just exactly that; we got original designs and we did that from the group of officers of all grades, junior officers and noncommissioned officers, who are going to live in the houses.

Mr. FLOOD. Did you get any good out of it?

General LAWTON. Yes; there were suggestions and ideas concerning changes in doors and so on.

Mr. FLOOD. That is what I mean.

General LAWTON. Equipment in the kitchen and so on.

Mr. MILLER. As a practical matter, it would have meant also submitting a tentative set of plans, would it not?

General LAWTON. Yes.

Mr. MILLER. Otherwise, you would get such a variety of suggestions you would never be able to use them.

Mr. FLOOD. But it does introduce an awful lot of good thought.

General LAWTON. Yes.

Mr. FOSTER. Mr. Flood, although we have not made an Army-wide field survey, representatives from the Pentagon and from the district offices of the Chief of Engineers have frequently made visits to family housing projects. I have visited possibly 300 different sets of family quarters in recent years and have had conversations with the occupants, both husband and wife, asking them what is wrong; it has been more or less an informal type of study. So in an informal way, that has actually been done.

Mr. FLOOD. Well, that is good.

Mr. MILLER. In connection with the additional cost, does that include any landscaping, or just the naked building?

Colonel SHULER. It includes the streets, sidewalks, utilities, and minimum landscaping, telephones, and refrigerators.

Mr. MILLER. It does include the sidewalks and the landscaping, in this total amount?

Colonel SHULER. That is right.

Mr. SIKES. Go ahead, Colonel Shuler.

BLACK HILLS ORDNANCE DEPOT, S. DAK.

Colonel SHULER. The next station is Black Hills Ordnance Depot, which is in South Dakota. It is an isolated station. We have requested four sets of family quarters at Black Hills Ordnance Depot costing $78,000. The total requirement is for 519 sets based on peacetime Army strength.

Mr. SIKES. When you have a requirement for 519 sets, why do you come here and ask for only 4 sets?

Colonel SHULER. Mr. Chairman, this strength at this station is all civilian other than five officers in the permanent peacetime Army. There are 835 civilians. We ask for 4 sets to take care of four-fifths of the Army requirements and intend requesting next year against the civilian requirements.

Mr. SIKES. Is it not impractical to build four sets of quarters when you have need for additional quarters? Does it not run your costs up considerably?

Colonel SHULER. Yes; it is apt to.

Mr. SIKES. It seems it would have been more logical to wait until you can build 50 or 100 or whatever you intend to build when you go into civilian needs.

Colonel SHULER. May I make a statement off the record?

(Discussion off the record.)

Mr. SIKES. It still does not change the fact that it seems like an impractical thing to come in for four sets of quarters.

Mr. MILLER. It also seems strange, if you are going to have five officers' families there, why you want to do only four-fifths of the requirements. It seems that you would do five.

Colonel SHULER. On the basis of what we are asking this year, it will take 5 years to accomplish our total requirements. That is the way we worked it out. I will agree that 4 will not get us too good a price and we will not resist Senator Case's addition of 100 sets, if it goes through.

Mr. RILEY. Is this station near a town of any kind?

Colonel SHULER. This is 9 miles southwest of Edgemont, which has a population of 1,725, and 35 miles from Hot Springs, a town of 5,000, so it is an isolated station.

Mr. SIKES. Where do the people live now who are there?

Colonel SHULER. They live in inadequate temporary quarters and a few in this outlying community. They are all housed now.

Mr. SIKES. On the base?

Colonel SHULER. Either on the base or a few in Edgemont.

Mr. SIKES. What do you mean by adequate temporary quarters?

Colonel SHULER. We mean nonpermanent quarters. Some of these quartes are old enlisted barracks that have been converted to housing units. They are adequate in size but not adequate in the quality we need in permanent quarters.

Mr. RILEY. If they are like most I have seen, you can hear a pin drop in the apartment next door.

Mr. SIKES. You have the same situation in your district. The services apparently try to make up for the inadequacies in the type of quarters by giving the officers two sets of quarters. I think I would rather have less space and more adequate quarters.

FORFEITURE OF RENTAL ALLOWANCE

Mr. MILLER. One thing that has always seemed to me unfair to officers is that when they are required to take quarters of that sort the full rental allowance is deducted and they are paying the price they would have to pay for adequate quarters.

Mr. SIKES. There should be an allowance for poor quarters.

Mr. MILLER. That is right.

Colonel SHULER. If the commanding officer of the post declares quarters not adequate, the person has a choice. He can live elsewhere. It is only when they are declared adequate and he chooses to occupy that he forfeits his rental allowance.

Mr. MILLER. This was true of the Navy, I know. At one post they had a bunch of quonset huts that were Government-owned and Navy officers were quartered there. Some were occupied by commanders and some by lieutenants junior grade and they were the same, but the full rental allowance was deducted in each case.

Mr. SIKES. How long has this been in effect?

Colonel SHULER. You mean the policy of the Army?

Mr. SIKES. Yes.

Colonel SHULER. I believe since I have been in the Army it is only when quarters are declared adequate that you have to occupy them and lose your rental allowance.

Mr. MILLER. I believe you said you had been in the Army 19 years?

Colonel SHULER. Yes.

Mr. MILLER. In the 37 years I was in and out of the Army on occasion I was given to understand that if the post commander decided that a given place was suitable for you to live, you lived there. In many instances I do not believe the post commander would have been hypocritical enough to say the quarters were adequate.

Mr. SIKES. If the quarters are subadequate, you should not have to forfeit your whole rental allowance.

Colonel SHULER. That is the way the Navy does it. He forfeits 10 or 50 percent, whatever is assessed, and whatever is above that he keeps.

Mr. MILLER. There is no way I can see how you can defend having a lieutenant commander or a commander in the Navy in unit A pay his full rental allowance whereas right next door in exactly the same unit is a lieutenant that is paying that much less because of the difference in rank. They charge the full amount regardless of the quality of the building. That is what the Navy has done in the past.

Colonel SHULER. I thought that was what the Army has done in the past. The Navy has this system where they assess the adequacy of the quarters and take away a percentage of the rental allowance. If I am wrong, I would like to be corrected.

Mr. FOSTER. They do that only in certain quarters they have taken over from other Federal agencies.

Mr. SIKES. Why do you not prepare for the record a complete and detailed analysis of this thing so that we will know what each Service

does under the circumstances. I think it would be well to know what the differences are.

(The following information was submitted for the record:)

The Department of the Army and the Department of the Air Force permit occupancy of substandard and inadequate public quarters on a voluntary basis, with full forfeiture of quarters allowance. No persons are assigned such quarters on an involuntary basis. Both the Army and the Air Force plan to establish procedures for leasing substandard Lanham Act public housing acquired by the Services at a fair rental without forfeiture of quarters allowances. This action does not apply to all inadequate quarters, since there is at present no legal basis for such action.

The Department of the Navy follows the same policy as the Army and the Air Force with respect to all quarters acquired with funds appropriated for the construction of public quarters of any kind. The Navy, unlike the Army and the Air Force in the past, has assigned quarters on a rental basis without forfeiture of quarters allowances in those cases where the quarters involved were initially constructed as rental units (for example, PHA housing) or were initially constructed for administrative or other use. Converted barracks, BOQ's and similar structures were generally excluded from the category of rental units.

Mr. MILLER. There is no question it is bad for morale to do something that in effect creates a dishonest situation. If a particular unit is not up to standard, whether it be through station allowance or cash or however it is done, there should be some adjustment of the rental made just as a matter of fairplay, it seems to me.

Mr. FOSTER. There has been a bill pending for 4 years which would rectify what Mr. Miller is talking about.

Mr. SIKES. There is need for it.

Colonel SHULER. My experience has been, I have always forfeited my quarters allowance once assigned quarters.

Mr. MILLER. It is either all or nothing, as I understand it.

Colonel SHULER. That is correct.

Mr. SIKES. Go ahead.

BLUE GRASS ORDNANCE DEPOT, KY.

Colonel SHULER. The next station is Blue Grass Ordnance Depot in Kentucky. We are asking for the funding of an ammunition cleaning and painting building and facilities costing $509,000.

For justification of this item, the facilities are designed to accomplish abrasive and chemical cleaning and spray painting of ammunition up to and including 155 millimeter shells and associated inert components; to release 8,000 tons of restricted ammunition storage space and to provide capacities required to preclude ammunition destruction due to deterioration. The basis is total ammunition storage capacity of 300,000 tons. One-third or 100,000 tons of "on hand" storage consists of types planned for processing through this facility. Ammunition maintenance requires a 10-year average turnover or 10 percent per year. This proposed facility is designed to provide for processing 10,000 tons per year of ammunition and associated inert components, one-shift operation. Backlog reduction or excessive renovation or demolition requirements could be accomplished by two-shift operations. This facility would replace the installation presently located in a temporary type building with an area of 4,800 square feet and a production capacity of 3,500 tons per year or only one-third of the required production. By allowing this condition to go on would just compound the backlog we would have to do in the future.

Erie Ordnance Depot, Ohio

The next station is the Erie Ordnance Depot in the State of Ohio. This request consists of two items, a dike protection system, $220,000, and a guided missile maintenance shop, $1,713,000.

DIKE PROTECTION SYSTEM

On the dike protection system, we had a condition in March 1954 which seriously weakened the primary and secondary dikes which protect the depot from flooding from Lake Erie. Approximately three-fourths of the depot is below lake level. The primary dike is 577 feet above mean sea level and in 1952 the high water level was 578.47 feet, or almost a foot and a half above the dike. We had to spend $50,000 of repairs and utilities funds to make temporary repairs and sandbagging of the dike. We are dealing here with millions of dollars of ordnance equipment and material, and we wish to strengthen these two dikes.

I can give you a description of what we want to do. This request is to cover the construction of a permanent dike system consisting of widening and leveling temporary dikes approximately 8,500 feet and 14,000 feet long, seeding of earth slope and providing an access road approximately 3,500 feet along a portion of the dike for patrol and maintenance purposes. The maximum elevation of the primary dike would be 580.5 feet and of the secondary dike 579 feet, which would give us enough elevation to protect the depot.

Mr. Ford. Off the record.

(Discussion off the record.)

GUIDED MISSILE MAINTENANCE SHOP

Colonel Shuler. The next item is a guided missile maintenance shop at the Erie Ordnance Depot, and I would like to tell the committee at this time that the long-range plan is for five of these and we have two in this year's program, this one and one at the Pueblo Ordnance Depot.

The guided missile maintenance shops are necessary to do major repair, modification and rebuilding of guided missile systems and their components exclusive of warheads and propellants, and exclusive of certain ground handling and control equipment which can be repaired in the existing automotive or artillery rebuild shops. The components maintained will include propulsion systems, internal guidance components and ground control equipment, except automotive type components. The missiles maintained will include initially Nike and Corporal, and ultimately LaCrosse, Redstone and others now in the research and development stage. These shops will be centrally located and serve the various Nike stations throughout the United States mission.

Mr. Riley. If an improved missile is developed, will this take care of it?

Colonel Shuler. That is right, sir.

64932—55——3

Frankford Arsenal, Pa.

The next station is the Frankford Arsenal in Pennsylvania. This is an old station dating back to 1816.

STORM DRAINAGE SYSTEM

We have an item for a storm drainage system, $1,127,000. That is split $855,000 to fund a proposed new authorization and $272,000 to fund an existing authorization under Public Law 155 of the 82d Congress.

This project is to correct a storm drainage deficiency in the system at Frankford Arsenal. During the peaks of the storms we have had to dump industrial wastes directly into Frankford Creek and the Delaware River, and we have had many complaints by the water board, department of health, of the State of Pennsylvania, regarding this discharge.

Lordstown Ordnance Depot, Ohio

The next item is the Lordstown Ordnance Depot, page 21. This is an item for firewalls and sprinkler systems in 7 buildings, $875,000. This item is needed to protect about $200 million of material stored in 7 temporary type sheds totaling 1,080,000 square feet. The project would provide, we believe, adequate protection for this large amount of material and further would meet the safety requirements which we have established

Mr. Ford. Does it make sense to put firewalls and sprinkler systems in temporary buildings?

Colonel Shuler. We feel these temporary buildings are in good enough repair that, with proper maintenance, they will last a good many years, and we feel we need these firewalls and sprinkler systems to protect this material.

Mr. Ford. When you say "temporary type sheds," what is the construction?

Colonel Shuler. Wood frame. Is there any concrete at all, Mr. Van Kuren?

Mr. Van Kuren. No.

Colonel Shuler. What kind of floor?

Mr. Van Kuren. Bituminous floor.

Mr. Riley. About all you need are good walls and a good floor.

Colonel Shuler. Yes.

Mr. Flood. Can these systems be removed and put in another building?

Colonel Shuler. You mean the sprinkler systems?

Mr. Flood. Yes.

Colonel Shuler. I think so. I do not think the fire walls could, because once they are put in they are a part of the building. The sprinkler systems, I believe they can.

Mr. Flood. Keeping in mind these are temporary buildings and you are putting in a temporary protection obviously for a temporary purpose, I gather this is more for the protection of the materiel stored than the buildings?

Colonel Shuler. Oh, yes. There is $200 million of materiel stored in these 7 buildings.

Mr. FLOOD. I wonder if you could not come up with something that is mobile?

Colonel SHULER. There is no doubt we could take the sprinkler system out and place it some place else, but the firewalls, you could not.

Mr. MILLER. Is the firewall a permanent-type construction?

Colonel SHULER. Essentially.

Mr. MILLER. When you put firewalls in a temporary building, do you not as a matter of fact bring it in a category where it is a permanent building?

Colonel SHULER. No.

You have 1,080,000 square feet of space, and at $6 a square foot a permanent building would cost $6 million.

Mr. MILLER. When you put firewalls in, that is permanent-type construction. Can you not replace the temporary part and still use the firewalls?

Colonel SHULER. We could.

Mr. MILLER. And that is what you would do when the temporary features required replacement?

Colonel SHULER. Yes. When we come to a point where we think it would cost too much to maintain the temporary part, we will come in and ask Congress for authorization and money to replace with permanent-type construction.

Mr. MILLER. And you would still use the firewalls?

Colonel SHULER. Yes; if at all possible.

PUEBLO ORDNANCE DEPOT, COLO.

The next item is Pueblo Ordnance Depot in Colorado. This is the second of the guided missile maintenance shops as I described under the Erie Ordnance Depot. This shop would cost $1,843,000 and would handle the depot maintenance of antiaircraft and other artillery as well as Nike and other guided missiles.

Mr. MILLER. This has the same mission as the one at Erie?

Colonel SHULER. Yes.

Mr. MILLER. Have you ever had such a facility before?

Colonel SHULER. No. This is a new design, a special design. The only difference in cost between this one and the one at Erie is a slight difference in utility cost. The cost of the building is the same, $23 per square foot.

RED RIVER ARSENAL, TEX.

The next item is at Red River Arsenal, page 25, a cartridge case renovation building and auxiliary facilities, $140,000.

I would like to mention, Mr. Chairman, that this is the third and last increment for this facility. This is to handle the following tonnage: 13,000 tons a year based on a total storage capacity of 260,000 tons of which it is estimated that one-fourth, or 65,000 tons, is of the cartridge-case type subject to processing through this facility. Experience factors indicate a yearly processing of 20 percent of onhand storage, which means 13,000 tons a year. The present backlog that exists is approximately 17,000 tons which we feel will require this work. Then, of course, we get our input every year.

There is a cartridge-case renovation building, 7,770 square feet, $93,000; mounded conc box magazine, 423 square feet, $17,000; three

inert storehouses, 1,605 square feet, $15,000; and utilities, including roads, walks, and site preparation, $15,000, totaling $140,000.

Redstone Arsenal, Ala.

The next station, on page 27, is Redstone Arsenal in Alabama.

The principal mission of this station is research and development of guided missiles and rockets, operation of ordnance ammunition lines, and warehousing and storage of ordnance materiels. There are 5 items in this request, preflight evaluation laboratory ($1,675,000); 3 static test service buildings ($757,000); hydraulic and electrical shop ($113,000); chapel ($171,000) and main post exchange ($149,000).

PREFLIGHT EVALUATION LABORATORY

Taking these in order, the first item is the preflight evaluation laboratory. This laboratory is necessary to provide suitable facilities for phyiscal measurements and environmental tests on solid propellant rockets and JATO's under controlled conditions.

Mr. Sikes. Does this replace an existing temporary building?

Colonel Shuler. No. This is a new structure for which we have not appropriate facilities at this time. We have to test these rockets and JATO's under controlled conditions for fungus, humidity, salt spray, all types of environmental tests. There are no facilities available which can meet these requirements.

STATIC TEST SERVICE BUILDINGS

The next item is three static test service buildings. This project will be used by the Static Testing Department of the Redstone Division of the Thiokol Chemical Corps for motor service prior to firing, motor cleanup after firing, igniter preparation, propellant cutting operations, preparation of photographic data, and administrative space in connection with the static test stands now under construction. These operations are presently being performed in seven separate remotely located buildings originally designed as change house, tetryl screening building, peleting building, and ammunition assembly building, all built in 1942. The total floor space now being used for these operations is 12,700 square feet as compared to the 29,485 square feet required and provided by this proposal. In other words, the floor space we have is a little less than half what we need, and it is inadequate.

HYDRAULIC AND ELECTRICAL SHOP

The next item is a hydraulic and electrical shop. We have to give the students at this station very technical training in the fundamentals of hydraulics, pneumatics, propulsion, and inspection in connection with guided missile repair. The proposed facility will include provision for minor repair of equipment within the Ordnance Guided Missile School and construction and maintenance of training aids for the Mechanical Branch.

I might point out these are the type of noncommissioned officers and men who will have to work on the guided-missile repair and they must be very technically trained in that business.

CHAPEL

The next item is a chapel at Redstone Arsenal, which is the standard facility with a slight increase. It is to have a seating capacity of 300, at a cost of $171,000.

Mr. SIKES. What are the present chapel facilities at Redstone Arsenal?

Colonel SHULER. We have no permanent chapel facilities, but we are now using a temporary frame building with a total floor area of 5,000 square feet. This gives us seating capacity for only 150 persons. The building is located adjacent to a butcher shop and is very unattractive for worship.

Mr. RILEY. Is this to be masonry construction?

Colonel SHULER. Masonry construction with a 25- or 30-year life.

MAIN POST EXCHANGE

The next item is a main post exchange to provide the military personnel assigned to Redstone Arsenal and their dependents with facilities which will permit the purchase of merchandise without inconvenience. The existing post exchange of 8,700 square feet is located in a mobilization-type barracks which is approximately 3 miles from the new enlisted men's housing area. It does not include sufficient space to provide for the services and stock the merchandise required, and it is not centrally located.

We have a requirement for 10,100 square feet, and this request is for that.

ROCK ISLAND ARSENAL, ILLINOIS

The next item is Rock Island Arsenal, page 33. This is another case of requesting firewalls costing $347,000 for fire protection. It is for building 299 at Rock Island Arsenal in which critical ordnance materiel valued at approximately $275 million is stored. These firewalls are required to divide 1,062,600 square feet into fire areas in accordance with the code of the National Board of Fire Underwriters.

ROSSFORD ORDNANCE DEPOT, OHIO

The next station is Rossford Ordnance Depot. This request is for the rehabilitation of the water-distribution system, $400,000. Our situation there is a need to correct a deficiency in the water-distribution system to meet fire-flow requirements. We have a situation where the source of water supply for the depot is the municipally owned plant of the city of Toledo, which obtains its raw water from a crib intake on Lake Erie and has a capacity of 80 million gallons per day. The supply line to the depot is a single 8-inch pipe approximately 8,222 feet long from its connection to an 8-inch main on the city system. The depot distribution system consists of 46,650 linear feet of permanent 12-, 10-, 8-, and 6-inch piping and 18,700 linear-feet of 12- and 6-inch wooden piping installed in 1941. Tests made at the depot indicate that supply for fire flow is too low for safety using the city connections and elevated tanks. Because of this wooden piping, we are having to reduce our pumping pressure way down and if we ever get into a fire situation, we are afraid that if we increased the pressure we will burst this old wood-stave pipe, and

this proposal is to correct that system and to get ourselves a modern water-distribution system.

Mr. RILEY. When was that wooden pipe put in there, Colonel? Was it during the war when they could not get iron or steel?

Colonel SHULER. 1941, sir. Iron and steel was hard to get.

SAVANNA ORDNANCE DEPOT, ILL.

The next station is the Savanna Ordnance Depot in Illinois. This is a request for $342,000 for ammunition washout facilities. I might define what the term "ammunition washout" means. It is a removal of TNT propellants from obsolete ammunition and processing it until we get the pure TNT for redistribution in the Ordnance supply system.

Mr. SIKES. Presumably you have facilities for doing that now?

Colonel SHULER. On this particular item, sir, we have no washout facilities provided at this depot, and we would have to take this ammunition through the New Orleans Port of Embarkation and dump it in the gulf at a cost of about $500,000.

Mr. SIKES. How often?

Colonel SHULER. To get rid of the 7,000 tons we have now. In addition to that we have an additional 20,000 tons of ammunition now in storage at Savanna which will require either dumping or demilitarization.

Mr SIKES. We will make money, then, by having this facility?

Colonel SHULER. That is correct.

Mr. SIKES. Within a short time.

Colonel SHULER. That is correct.

SENECA ORDNANCE DEPOT, N. Y.

The next station is the Seneca Ordnance Depot. We are asking for an enlisted men's service club, $129,000. You will note a strange situation in the book where we list under present strength 0 enlisted men. This is the support for——

Mr. FOSTER. I think this should be off the record.

Mr. SIKES. Off the record.

(Discussion off the record.)

Colonel SHULER. It supports Site Yoke when we do have an enlisted strength which requires this service club.

SIERRA ORDNANCE DEPOT, CALIF.

Colonel SHULER. The next station is Sierra Ordnance Depot in California, two items.

AMMUNITION NORMAL MAINTENANCE BUILDING

The first is an ammunition normal maintenance building with auxiliary facilities, $733,000. Ammunition in storage at Sierra Ordnance Depot averages approximately 360,000 tons, of which 10 percent or 36,000 tons require normal maintenance or modification each year. The bomb and shell reconditioning building now under construction is designed to process one-third of the total or 12,000 tons of types other than those to be processed in the proposed facility.

The existing ammunition workshops are mainly occupied by major modification, renovation, and demilitarization projects and will handle normal maintenance of only 50 percent of the remaining two-thirds of the total or 12,000 tons. Outdoor operations, being limited by weather and availability of manpower to an output of 3,000 tons per year or less, do not meet the remaining ammunition processing requirements of 12,000 tons per year.

AMMUNITION DEMOLITION AND BURNING GROUND

The next item is for an ammunition demolition and burning ground. This project costing $342,000 is required to fulfill the minimum requirements for ammunition demolition and explosive burning operations and to provide safe shelter for persons performing the operations. We now have a very makeshift operation which gives us a very small operating area and we are not able to handle the total tonnage we need to destroy. This would give us a safe facility to do that.

White Sands Proving Ground, N. Mex.

The next station is White Sands Proving Ground in New Mexico. There are three items: enlisted men's mess, $262,000; technical engineering building, $476,000; and missile countermeasure laboratory, $509,000.

ENLISTED MEN'S MESS

Taking the items up in turn, the first is the enlisted men's mess. At the present time an average of 2,000 enlisted men are fed 3 meals per day in one 500-man consolidated mess and two 250-man company messes. All of the existing facilities are of emergency type construction. The average feeding time for the noonday meal is 1½ hours. This results in a delay in effective scheduling of military personnel in participating in the mission of the proving ground. It is not feasible to stagger the feeding hours, especially for the noonday meal, since the enlisted personnel are closely integrated with the scientists and other civilians working there.

TECHNICAL ENGINEERING BUILDING

The next item is a technical engineering building. This facility would house all the technical personnel and technical staff activities at White Sands Proving Ground. The needs to be met by this facility will include: Consolidation of all technical staff, 218, which are now involved in the Army mission, guided missile, and rocket programs. The activities are now located in four quonset buildings. Approximately 90 personnel concerned with such technical activities are crowded into the headquarters building, in addition to the people working in these quonset huts.

MISSILE COUNTERMEASURE LABORATORY

The next item is the missile countermeasure laboratory, $509,000. I might talk about the mission just a bit on this one since it is an out-of-the-ordinary structure.

The proposed facility will consist of two wings with partial basement attached to the existing frequency coordination laboratory

which was designed to accommodate this addition. The proposed facility will house the engineering offices and laboratories required primarily to support the electronic warfare mission of White Sands Proving Ground. Approximately 200 personnel are involved. There is an urgent need for this proposed facility due to a planned expansion of electronic warfare activity as well as an existing backlog of engineering and countermeasures tasks that have not been undertaken due to lack of laboratory and engineering office space.

Wingate Ordnance Depot, N. Mex.

The next station is Wingate Ordnance Depot, two items, a bomb and shell reconditioning building ($455,000) and ammunition demolition protective facilities ($177,000).

BOMB AND SHELL RECONDITIONING BUILDING

The first item is needed to recondition—that is, derusting, cleaning, and repainting—bombs, large caliber shells and similar ammunition items. Based upon existing storage capacity and normal ammunition deterioration, a need exists for processing approximately 9,000 tons of such items per year. There exists an unprocessed backlog of 13,000 reparable ammunition items. Processing of ammunition is presently being performed, using hand labor methods, outdoors. The maximum processing rate amounts from 500 to 3,000 tons per year, depending on weather conditions, which is considerably below the requirement.

AMMUNITION DEMOLITION PROTECTIVE STRUCTURES

The next item, on page 50, is ammunition demolition protective structures. This project is required to fulfill the minimum requirements for ammunition demolition and explosive burning operations and to provide safe shelter for persons performing the operations. Under makeshift operations the requirements for destruction of 1,040 tons per year is reduced to 400 tons per year or one-third efficient. This proposed new facility will efficiently demilitarize the 1,040 tons per year and in addition provide, by use of split shifts, a means of reducing the accumulated backlog.

Mr. Riley. Do you salvage anything from that operation?

Colonel Shuler. Yes; we salvage the brass and anything we can.

That completes the Ordnance. I wonder if I might excuse Mr. Van Kuren?

Mr. Sikes. Yes.

Colonel Shuler. Off the record.

(Discussion off the record.)

Quartermaster Corps Facilities

Atlanta General Depot, Ga.

Colonel Shuler. The next is the Quartermaster Corps, and the first station is the Atlanta General Depot in the State of Georgia. The item is a cold-storage warehouse, $84,000.

This facility is required for storage, handling, and distribution of perishables, and will replace a 3,375 square foot World War II mobili-

zation-type building on which deterioration has accelerated during the past 4 years to where the exterior wall vapor seals are completely perforated, studs and wood framing have decayed, a portion of the insulated floors are in contact with the base slab, and settling floors and walls cause stacks and cooling units to become off balance, and breaks in refrigerator lines create a hazardous condition. We need this to replace the existing structure. This is a permanent station.

Mr. RILEY. Mr. Chairman, I understand this is in an area where you have leased and utilized practically everything that is available.

Colonel SHULER. Yes. We have a study on the commercial warehouse situation there, and we have surveyed absolutely everything available. I would be gald to put this in the record if you wish it to be supplied, Mr. Chairman.

Mr. SIKES. I think that would be a good thing to do.

(The statement referred to follows:)

The use of commercial cold-storage facilities to replace proposed cold-storage warehouse at Atlanta General Depot is impracticable for following reasons:

1. Commercial cold-storage space, as such, is not available in the Atlanta area. The ice and cold storage firms will rent a cold storage service whereby the customer is assigned storage blocks in large rooms, for purposes of control and segregation, and the firm does all the handling excluding transportation. The nearest available commercial facilities of this type are in city of Atlanta, approximately 12 miles away. This type of service would require that the Government furnish all transportation, including the necessary refrigerated vans, and would add a substantial increment to the expense of handling and transporting subsistence items and seriously conflict with the policy of economy of operations.

2. An alternative to the rental of storage service would be the day-to-day purchase of supplies. This would prevent the exercise of any control for sanitation, inspection by competent inspectors, proper storage temperatures, etc. This method would also increase handling and transportation expenses and increase the base cost of supplies through the purchase of smaller quantities on each order.

BELLE MEADE GENERAL DEPOT, N. J.

Colonel SHULER The next station is Belle Meade General Depot, one item, fire walls, $174,000 This is to protect about $10 million worth of supplies stored in each shed. This will give us 40,000 square feet between the firewalls, and divide our total square footage in each building which is 170,800 square feet, between the 4 fire areas.

FAMILY HOUSING

The family housing item at Belle Meade is for 10 sets of family quarters, $151,000. Those, sir, are for 8 company grade quarters and 2 field grade quarters. The requirements there are 32. We have a 100-percent deficit. We have no assets. This request will provide quarters for 10 of the key people in the installation. I believe that with the proposed increase in the monetary ceilings we are going to be able to do a little better on the small jobs such as the two we could not award, which I mentioned yesterday; one was the Yuma test station and what was the other one, Mr. Zackrison?

Mr. ZACKRISON. Dugway.

Colonel SHULER. Dugway Proving Ground, Utah. I believe we are going to do a little better when Congress raises the money limitation by grades that we have been under this year.

Mr. SIKES. How did the Department of Defense decide on the ratio of 1-bedroom, 2-bedroom and 3-bedroom houses? It seems to me there is not much of anything more useless than a 1-bedroom house, and judging from the number of dependent facilities that we are called upon to provide from time to time, I think that you probably should be estimating a minimum of 3-bedroom houses.

Colonel SHULER. We get a lot of 2-bedroom houses, sir, under the Wherry arrangement. In other words, we are not going to be able to build as many with this money, of the 2-bedroom type, as we would like to because we only have——

Mr. SIKES. (interposing) The average American family very soon gets to the point where it needs 3 bedrooms and I do not know of any that can comfortably do with 1 bedroom. They may exist with 1 bedroom. Why should you build 1-bedroom houses?

Mr. RILEY. I agree with you. I think it is poor economy to build 1 bedroom; and I think 2 bedrooms should be limited in number; and I think, more often, 3 bedrooms are more desirable, even if 1 of the 3 is small.

Colonel SHULER. I will have Mr. Foster tell you why we build the 1-bedroom units.

Mr. FOSTER. Mr. Chairman, the Army's proposal, right after World War II, when we got into family housing, was to build nothing but 3-bedroom houses. We ran into steady opposition from the Bureau of the Budget, which at that time, was trying to establish regulations governing family quarters for all Government personnel, not only the military but others.

Mr. SIKES. I knew the Bureau of the Budget was trying to establish regulations in many fields but did not know they extended so far.

Mr. FOSTER. They made a comparison, Mr. Chairman, between military- and Government-owned housing and privately built housing in and around the metropolitan areas, such as Washington. They pointed out the 1-bedroom apartments, in the garden type of apartment developments, were and are in large demand for certain classes of people including, young married couples who, for one reason or another, did not have a family.

Mr. SIKES. But their families still like to come to see them.

Mr. FOSTER. Yes. We made that argument to them. The percentages of 1-, 2-, and 3-bedroom houses were arrived at, statistically, from a survey, a cross section that existed, I think, in 1950.

Mr. SIKES. Most of the people who are renting 1-bedroom apartments in Washington do not have rental allowance.

Mr. RILEY. That is the trouble, they do not have a rental allowance.

Mr. Chairman, I would be in favor of putting something in the report that they cannot build any housing with less than two bedrooms.

Mr. SIKES. I think that would be very useful.

SPACE AND COST LIMITATIONS

Mr. ZACKRISON. I might make one comment, that in the present legislation, there is a limitation to the effect that we may not exceed 1,080 square feet for the noncommissioned officers' quarters; 1,250 square feet for the company-grade officers, with an average limitation of 1,080 square feet for both. That means that we cannot build all

3-bedroom houses, because a 3-bedroom apartment smaller than approximately 1,000 square feet is not worth anything either. There is no point in building an 8 by 8-foot bedroom or an 8 by 10 bedroom. You might just as well get a good bedroom, and have 2 rooms rather than 3.

In addition to this, the other limitation was $10,040 and $11,040 for the two respective types of quarters, which also limited the size. We were not able to build all 3-bedroom apartments, or even 2- and 3-room apartments, within our limitation.

Mr. SIKES. That limitation is in the legislation?

Mr. ZACKRISON. That was in the legislation. I understand that at present it may not be in the new legislation.

Mr. SIKES. That is the reason I asked.

Colonel SHULER. That was in last year's legislation. We do not expect it to go in this year.

Mr. SIKES. But that seems to be in the picture right now.

Mr. FOSTER. The only question is whether or not the Senate committee, which is working on the matter now——

Mr. SIKES. If that limitation is not in the bill, then what will your recommendation be, what will your procedure be? I agree that is a terribly low square-footage allotment.

Mr. ZACKRISON. Yes.

Mr. SIKES. You cannot get much of a house, regardless of whether it is 1-, 2-, or 3-bedrooms, with 1,000 square feet.

Mr. ZACKRISON. We could not build all three bedrooms, within the limitation, without suffering badly in quality of construction. We could eliminate the 1-bedroom apartment, Mr. Riley, but we could not make all units with 3 bedrooms which would be very desirable in size.

Mr. SIKES. Within the limitation, you can make all 2 or 3 bedrooms?

Mr. ZACKRISON. If we were able to build up to 1,250 square feet, without the average limitation, then we could.

Mr. SIKES. What would that do to your cost factor?

Mr. ZACKRISON. We would have to add another, probably, 20 percent, based on the area; it would be about 20 percent.

Mr. SIKES. It would not be that much.

Mr. ZACKRISON. The cost varies almost directly according to the area, not entirely. With the additional area in a bedroom, it is not quite the whole. It would be at least 15 percent.

Mr. SIKES. Another hundred square feet added to a bedroom would be——

Mr. ZACKRISON. Approximately $1,000.

Mr. SIKES. Approximately $1,000?

Mr. ZACKRISON. Yes.

Mr. SIKES. Which would be a little more, would it not, than 10 percent?

Mr. RILEY. You could do it for 10 percent; you have the foundation and the roof and the utilities already in.

Mr. ZACKRISON. Yes; we have those items.

Mr. SIKES. And I think it would make a lot better housing, a more desirable type of housing.

Mr. RILEY. Yes. By adding 10 or 12 percent, you would have a house that would be worth several thousand dollars more.

Mr. ZACKRISON. We would like to do it, but with that limitation——

Mr. SIKES. Presumably, it is not going to be a part of the new bill, and I think it would be well for you people to bring to this subcommittee some information about the difference in costs; the difference you would like to see within reason in square footage, the difference you would recommend in order to make these 2- or 3-bedroom houses, rather than 1-, 2-, or 3-bedroom houses, and the difference in costs, so we would have some information to study in this connection.

Mr. RILEY. Mr. Chairman, I think that is a very wise provision, because housing now is extremely short, and we are more or less setting a policy. I think it is false economy to build a one-bedroom house.

Mr. SIKES. How much money do you have in this bill?

Colonel SHULER. $123 million.

Mr. FOSTER. At an average of $13,500.

Colonel SHULER. The average is a little below $13,500, including utilities and everything.

Mr. SIKES. So that for about 10 percent, you would have a much better house.

Mr. RILEY. That would be a matter of about $150 million.

Mr. SIKES. With 10 percent more, I think you would have a lot more house.

Colonel SHULER. We have had to squeeze everything down for the family housing, under the law that we have for building family housing. And we hope the limitations will be raised to $12,000, $14,000, $16,000, $18,000, and $20,000 from NCO to general officer grade.

Mr. SIKES. All right, Colonel.

Mr. FOSTER. Mr. Chairman, did you want that differential in cost and recommendation in the record or supplied to the committee separately?

Mr. SIKES. I do not see any reason why it should not go in the record, do you, Mr. Riley?

Mr. RILEY. No.

Mr. SIKES. Give us something that can go in the record. I can see where you might not be permitted to make recommendations, in view of the budget restrictions but you can give us some factual statement indicating what it would cost to do these things, and what some of the alternate suggestions might be.

Mr. FOSTER. Yes, sir.

(The information requested follows:)

Each extra bedroom in a NCO quarters would average 140 square feet, and in a junior officer's quarters it would be about 175 square feet. The cost would average somewhat above $10.50 a square foot. Thus each NCO quarter for which an extra bedroom was provided would cost about $1,470 more. Each junior officer's quarters would cost about $1,800 more.

If the 1-bedroom quarters now scheduled at 20 percent of the total were all made 3 bedrooms, it would cost about $3,000 more per unit for NCO's and $3,600 more for junior officers. If the 2-bedroom units were increased to 3-bedroom units, the cost for NCO quarters, junior officer's quarters would be increased $1,470 and $1,800 respectively. Based upon a 20 percent, 50 percent, and 30 percent distribution of 1-, 2- and 3-bedroom sizes at the present time, the change to all 3-bedroom units would result in an average weighted increased cost of $1,500 per unit. The present cost limitations should be increased by this amount to provide all 3-bedroom units. The average space limitation of 1,080 square feet for both NCO and junior officer's quarters would need to be eliminated.

It is suggested also that consideration be given to the provision of at least an added half bathroom for all 3-bedroom units. This would require an added increase in the space limitation of 40 square feet, and $800 in the cost limitation.

FORT LEE, VA.

Colonel SHULER. The next station is Fort Lee, Va., at page 56 of the big book; in the family housing book, page 12.

Fort Lee, sir, is the home of the Quartermaster Corps and was established in 1917.

We have a request for funding of 8 enlisted men's barracks, $5,095,000, the standard type of barracks that we have talked about previously; 1 BOQ, 60 spaces, $349,000; 3 battalion headquarters buildings, $175,000; 1 regimental dispensary, $110,000; 1 branch post exchange, $93,000; 4 motor repair shops, $283,000; motor part facilities, $34,000; hardstands for regimental motor parks, $234,000; and 3 battalion classroom buildings, $160,000.

The money requested for this station, other than family quarters, is $6,533,000.

ENLISTED MEN'S BARRACKS

First, on the 8 enlisted men's barracks, on page 57: the total requirement, based on the permanent peacetime Army is 5,082 permanent spaces. We have 2,101. We are asking for an additional 2,608, which will bring us fairly close to the ultimate goal at Fort Lee.

We would like to get these people out of the mobilization-type barracks that have deteriorated at this particular post to such an extent that we think the annual maintenance charge is just too high. Also, to improve the morale of the personnel.

BACHELOR OFFICERS' QUARTERS

Bachelor officers' quarters: We have a requirement for 360 spaces for the permanent peacetime Army; we have 60 now, and we are asking for this particular 60 in addition, which will give us 120 toward the 360 goal.

We figure this requirement by taking the assigned strength of married officers, 730, taking 10 percent of that, as the ones not married; and we take 20 percent of 105 students who are there for courses lasting 5 months or more. Then we take the students on TDY for shorter time courses, who cannot bring their families with them, and we add 21 transients, and that brings us up to the 360 requirement.

BATTALION HEADQUARTERS BUILDINGS

The next item is three battalion headquarters buildings with storerooms.

This project is required for the administrative command supply functions of 3 battalions, total of 2,781 men, assigned to permanent barracks constructed during fiscal years 1952 to 1955.

REGIMENTAL DISPENSARY

The next item is the regimental dispensary. This project is required to provide medical care for 2,781 troops assigned to the same permanent barracks constructed during the fiscal years 1952 to 1955. This will give us roughly half of the 7,700 square feet of the permanent regimental dispensary space needed for the permanent peacetime Army.

BRANCH POST EXCHANGE

The next item is the branch post exchange. We need a total of 8,000 square feet, and we are asking for 4,000, which will give us half of what we need for the permanent peacetime Army.

Mr. RILEY. What do you have there now in the form of a post exchange?

Colonel SHULER. We are using the existing exchange facilities in this area, which are located in a converted temporary-type structure, built in 1941, without suitable space for display and arrangement and stocking of merchandise. The existing space is not suitable for the welfare and morale of the enlisted men at the station. We feel that this proposed facility will make up for that deficiency.

MOTOR REPAIR SHOPS

The next item is for four motor repair shops in the regimental motor parks.

We have a total requirement for 36,000 square feet in the permanent Army and we are asking for 20,800, which gives us a little less than two-thirds of the total requirement. This will provide the organizational motor maintenance shops in the regimental motor parks for 2,781 enlisted men assigned to the same permanent barracks constructed during fiscal years 1952 to 1955.

MOTOR PARK FACILITIES—HARDSTAND

Now, the next two items, motor park facilities and hardstand are companion items for motor repair shops.

The motor park facilities are for such things as grease racks, wash platforms, oil houses and dispatch houses and chain-link fence around the motor park.

The hardstands are to go with these two items, to make the motor parks a useable installation and get us out of the mud.

This item of hardstand will require removing 32 mobilization type buildings which we hope to salvage. We will also have to demolish, in order to clear the site for the hardstand, 20 old barracks which have been converted to 60 substandard family quarters.

The following additional temporary building are not economically repairable and will be salvaged: 1 of the converted family quarters, 2 old recreational buildings, 2 battalion administrative buildings, 2 temporary BOQ's, a temporary messhall, a temporary guard house and 1 temporary post exchange.

Mr. SIKES. Is the money included to demolish them?

Colonel SHULER. Yes. The work includes the demolition of these 32 buildings, in the figure of 234,000.

Mr. SIKES. You are proposing to build some additional motor repair shops. It has been decreed that you are going to get out of the business, and there will be contract maintenance. What will you want with the motor repair shops, in view of the new age you will be operating under?

Colonel SHULER. Sir, I do not feel that these type of motor repairs are comparable to the type that we try to get done commercially. These, sir, are essentially for training purposes, training troops that have to do with motor repair during a war, or in the field, and these

are not just to repair motor vehicles per se. They have a lot to do with the training for repair, as well as the repair.

Mr. SIKES. You do not visualize there will come a day when we will have contract training of troops?

Colonel SHULER. No.

Mr. FOSTER. There is one thing I might add on that, Mr. Chairman. The regulations issued by the Secretary of Defense prohibit duplication of facilities, which could be handled commercially, and he applied that criteria to this program before he approved it.

Mr. RILEY. Mr. Chairman, it seems to me essential that certain types of maintenance will have to be done on the post if you are going to get an efficient operation. I cannot conceive of turning over all of these Army vehicles to the commercial type of maintenance, as desirable as it might seem. Not only that, but when the Army goes in the field, you have got to have men trained, unless the plan is to take the civilians with them.

Mr. SIKES. You are exactly right, Mr. Riley.

Colonel SHULER. I would like to point out, sir, while we are going through Fort Lee, that there are many of these items that we are going to find duplicated throughout the Continental Army program, because they are the troop-support type of items that have to do with the tactical units.

BATTALION CLASSROOM BUILDINGS

The next item is three battalion classroom buildings. These are to provide battalion classrooms for the same 2,781 enlisted men who are now living in the new barracks constructed between 1952 and 1955.

As you know, we have concentrated on getting our men into the better type of barracks and we have somewhat neglected the buildup of the supporting facilities, and you will find there is a little increased tempo in that, in this program.

FAMILY QUARTERS

The next item at Fort Lee, is for 150 sets of family quarters costing $2,056,000—this is page 12 in the small book.

The total requirement at Fort Lee is for 1,297 sets of family quarters. Against that, we have 400 sets of Wherry and 8 sets of permanent family quarters. That leaves us a deficiency of 889, or a deficiency of 69 percent against the total requirement.

This requirement is for 116 noncommissioned officers' quarters at an average cost of $12,075 overall; 26 company grade, at an average cost of $14,680 overall; 4 colonel quarters, at an average cost of $19,650 overall; and 4 generals and commanding officers' quarters, at an average cost of $26,400.

The total, counting collateral equipment is $2,056,000 for the 150 sets of family quarters.

Mr. RILEY. Colonel, does the city of Petersburg furnish any of your needed family quarters?

Colonel SHULER. This station, sir, is semi-isolated; it is 4.4 miles from Petersburg, which has a population of 36,700. And, in answer to your question, undoubtedly it absorbs a portion of the 889 deficit. In addition to that, we have 348 people living in inadequate temporary sets of quarters.

I might point out that this request is 95 percent for replacement of temporary quarters and only 5 percent for additional assets.

Mr. RILEY. I find in a great many cities that are that close to an Army camp, that private enterprise has furnished a considerable amount of the housing; if you build too many houses on the post, it leaves them with vacancies, which creates a rather bad situation locally. I preface that, on the premise that the housing they furnish is adequate and reasonable.

Colonel SHULER. On your last point, Mr. Riley, I would like to make a remark. For noncommissioned officers and the junior officers, depending upon the locality, we have to admit that it is sometimes very difficult for those people to get decent housing within the amount of rental allowance which they get.

Mr. RILEY. I realize that, and as you indicate, some communities are much more cooperative than others.

Colonel SHULER. Yes. You see our eligibility for quarters goes down to a corporal with 7 years' service. A corporal of 7 years' service—I cannot recall the new pay but I do not think he gets more than about $70 a month rental allowance, and that is not very much, and—in some localities, for instance here in Washington, he cannot get very much for that.

Mr. RILEY. There is another thing that enters into that, and I have discussed it with Secretary Wilson and Secretary Floete, it relieves the Government of the necessity for building schools and churches and some recreational facilities, where a part of this post can be integrated with the local community.

Colonel SHULER. Yes.

Mr. RILEY. I also think it a rather helpful condition to have some of the military's social life, if the community can furnish it, integrated with it, because it relieves the monotony of military life.

Colonel SHULER. That is right.

Mr. FOSTER. Mr. Chairman, I think it is pertinent to Mr. Riley's point, that in developing this program of family housing, weight was given to the current community support, so that in the case of Fort Lee, allowance was made for those people now living in Petersburg and other communities.

Mr. RILEY. I am glad to hear that, because I do think that it is a most wholesome proposition if there can be friendly relationship between the Army base and the community.

Colonel SHULER. Yes; I agree with that. This being our first increment of a 5-year program, in applying this to the total deficit, it is a little easier to make up this program than it is going to be in the last year, when we are going to have to get right down to the point of who can live in the community and who cannot.

Mr. RILEY. I hope that the Army will always evaluate the situation and do that before they come up with its request.

MEMPHIS GENERAL DEPOT, TENN.

Colonel SHULER. The next station, sir, is family housing only at Memphis General Depot, Tenn.

We are asking for five sets of family quarters for key personnel who should be living on the post, key officer personnel.

The total requirement there is for 48. We have a 100 percent deficiency, and we are asking for 2 company-grade sets, 2 colonel sets, and 1 general quarters, at a total cost of $99,000.

New Cumberland General Depot, Pa.

The next station is Cumberland General Depot, Pa., that is at page 15 in the housing book, involving 40 sets of family quarters, broken down into 32 noncommissioned officers, and 8 field grades costing $568,000.

The mission of this depot includes a branch of the United States Disciplinary Barracks. And these would be mostly for key people, including the USDB, disciplinary barracks personnel who would be readily available on the post in the event of an emergency.

The total requirement is 150; the assets are 33 permanent sets and we have a deficiency of 78 percent.

Sharpe General Depot, Calif.

The next item is the Sharpe General Depot, Calif. There are 2 requests, 1 for family housing and 1 for an elevated water tank, the latter item being for $92,000, indicated at 67 in your big book. This item is required to replace 2 wooden tanks of 150,000 gallons each, and timber supporting tower 67 feet high. The tower and tanks are deteriorating very rapidly. Recent borings in a number of the tower structural members indicate that there is pronounced wood rot, and we are afraid that the tower is going to collapse, and we want to replace these, sir, with a steel tower to alleviate this dangerous condition.

Mr. Sikes. How long has the present tower been there?

Colonel Shuler. It was constructed in 1942.

FAMILY HOUSING

The next item is a requirement for 15 sets of family quarters, broken down into 6 noncommissioned officers, 4 company grades, 4 field grades, and 1 general set, for a total of $245,000.

The total requirement is for 32 sets of family quarters, no assets, 100 percent deficiency. Sixty-seven percent of this request will replace inadequate temporary quarters, and 33 percent would be new assets.

Chemical Corps Facilities

Army Chemical Center, Md.

This takes us to the Chemical Corps, Mr. Chairman. The first station in the chemical corps is for the Army Chemical Center in Maryland. The items there are for the reconstruction of Van Bibber Dam, $253,000; renovation of 2 buildings for troop housing, $280,000; 3 storage buildings for flammables, $15,000; and installation of sprinkler systems in 49 buildings, $700,000.

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VAN BIBBER DAM

The first item is for the reconstruction of the Van Bibber Dam, $253,000.

This dam supplies the water for drinking, fire protection, commercial use, and production and research facilities at the Army Chemical Center in Maryland, which is a research and development center in the field of chemical and radiological warfare and radiological defense, and also conducts medical research as it concerns that portion of medicine dealing with bacteriological warfare, that type of thing.

The item we are asking for, sir, is the replacement of Van Bibber Dam which was built in 1918, and which is deteriorating very rapidly. Last summer we had a leakage of approximately 2 million gallons per day, and when we get a drought on top of that, it causes the flowage rate to drop from 10 million gallons per day to about 6 million gallons per day.

The 4 million gallons per day used at the plants, and the 2 million gallons per day lost through leakage, of course, serves to reduce the water level, which produces a very unsatisfactory condition at the intake.

We have carefully investigated piping water down from the Atchison Dam which is located above this, and we have arrived at the following conclusion: Atchison Dam is located 16,000 feet upstream, or approximately 3 miles from Van Bibber Dam, and to deliver the desired quantity of water, a 20-inch water main would be required. The 16,000 feet at $19 a lineal foot would equal $305,000. The estimate of land acquisition required would involve another $45,000 making a total of $350,000, as against $253,000 we are requesting for this, which is an estimated saving of about $97,000.

RENOVATION OF TROOP HOUSING

The next item at this same station is for the renovation of two buildings for troop housing. This, sir, is a job where we wish to renovate two permanent barracks buildings; they are old barracks buildings, built in 1918, but they are in very good condition structurally and the only thing we want to do is to bring them up to shape inside. It would cost us about $8.53 per square foot to do this, as against $12 to build new barracks. We feel, sir, that by doing this job, these buildings will continue to give good service, and we feel that it is economically justified. This request would give us two-thirds of the total requirements for permanent enlisted barracks at this station. Incidentally, this would house 210 enlisted men in these 2 buildings.

STORAGE BUILDINGS FOR INFLAMMABLES

The next item is for three storage buildings for inflammables. These are to provide adequate storage space for flammable materials, such as lacquer thinner, benzol, turpentine, gasoline, lubricating oil, and so forth. Two of these buildings would make available storage facilities for inflammables where none exist at the present time. The third building would replace a temporary structure which was moved to the site on skids. This request would give us the proper storage facilities for this type of material.

SPRINKLER SYSTEM

The last item, installation of sprinkler system, in 49 buildings, $700,000. The project will provide sprinkler protection in warehouses and offices, and is required for fire protection. The warehouses we want to protect include those containing materials, supplies and equipment, including paint, lacquers, boxes, inert end items, bombs, bulk chemicals, rubber, crude dies, lumber, and a long list of materials having a value of $38 million.

Deseret Chemical Depot, Utah

The next station is the Deseret Chemical Depot in the State of Utah, 1 item, the conversion of a shed to a care and preservation building, in the toxic area, costing $92,000. This project will give us an integrated facility for care and preservation of toxic and incendiary bombs and clusters. The computed savings will amortize this project in 2½ years. The project includes the conversion of a shed to a care and preservation building, and construction of a change house. No facilities are available at this time; we have had to do these activities in the open, under canvas, and that is not a satisfactory operation.

Camp Detrick, Md.

The next station is Camp Detrick, Md., four items: addition to boiler plant, $164,000; extension to existing roads, $159,000; extension to sanitary sewage system, $97,000; and extension to fence, $32,000; a total amount of $452,000.

ADDITION TO BOILER PLANT

The first item, addition to boiler plant, is required to supply adequate steam for the buildings now under construction or included in the 1955 execution program. This particular boiler we are asking for, sir, will be placed in space now available in the existing boiler plant, building No. 190. This will add on to our existing 232,500 pounds of capacity, 66,000 more, which will give us another increment toward our total requirement of 430,500 pounds per hour, which is the steam capacity requirement at Camp Detrick.

ROAD EXTENSION

The next item, "Extension to existing roads," will provide a road network in the northeast portion of area A, to serve the 17 existing buildings. We now have no adequate road network, and access to the buildings is provided by temporary type roads. This will provide the roads and will give us a little seeding and drainage.

SEWAGE SYSTEM EXTENSION

The next item, "Extension to sanitary sewage system." This is required to bring the sewer outfall system from its present capacity of 2,570 gallons per day to the ultimate capacity of 4,270 gallons per day. This requirement is based on a utility use analysis conducted by industrial engineers from the district engineer's office, and is based

on peak pumping capacity requirements. The requirement arises from projects now under construction and presently authorized.

FENCE EXTENSION

The next item is for the extension of the fence around area A. This will restrict a portion of area A, a classified area. It will enlarge the present 65-acre restriction to 114.5 acres restricted, and will give the required security. This station has a very classified mission.

DUGWAY PROVING GROUND, UTAH

The next is the Dugway Proving Ground which has 4 items; 4 enlisted men's barracks costing $445,000—these are not the permanent kind, but modified emergency-type 80-man barracks, which I will explain when I get to the item; test equipment maintenance shop, $119,000; and an addition to the station hospital, $333,000, which amounts to an isolation ward; and 16 sets of family quarters.

ENLISTED MEN'S BARRACKS

The first item, four enlisted men's barracks. We had a special troop unit activated on January 23, 1953, and stationed at Dugway Proving Ground, and this project is essential to provide housing and messing to meet the minimum requirements necessary for health and morale. The men are now living in World War II temporary-type buildings; they have tarpaper siding, and they are located in the D area—the Dog area—where the technical operations take place. This area is subject to contamination by toxic agents which are used in the Dugway Proving Ground. The buildings are very hot in the summer and are very difficult to heat in the winter. The post recreation and medical facilities are located 10 miles away in Easy area. Instead of building permanent-type buildings, we are putting in modified emergency buildings with 10- to 15-year life, which are less costly and which we think will do the job in this particular instance.

The next is the test equipment maintenance shop at Dugway.

Mr. SIKES. Before you leave the enlisted men barracks at Dugway, is it more economical to put in these 4 temporary barracks, than it would be to provide adequate facilities in 1 permanent barracks?

Colonel SHULER. Sir, these are not temporary buildings but, rather, modified emergency, which, to us, is just one step below the permanent, and one step above the temporary.

Mr. SIKES. Why would you build 4 barracks instead of 1?

Colonel SHULER. We do not have a standard for that type of barracks of the size and capacity that we do for the permanent. These type barracks are the normal one-story type barracks, 80-man barracks, standard design.

Do you have anything else to add on that, Mr. Zackrison?

Mr. ZACKRISON. This is more economical to build by reason of the fact that for modified emergency or emergency construction, you do not provide the same space we do for the permanent-type construction. In other words, they are housed in a less amount of space. In addition to this, by using more units in the small buildings, we provide a circulation space outside rather than inside the building. It is not as

desirable from that standpoint, and it has less are per man than the other permanent type.

Colonel SHULER. There is another reason, Mr. Chairman, which I think is apropos, and that is, that these are barracks for men included in the strength above the permanent peacetime Army strength. For those people above the permanent peacetime Army strength, they either live in the frame World War II mobilization type, or in the modified emergency type. We think they are going to be there considerably less time than the 20- to 30- year period for which we build permanent: that is really the main reason why we are using the modified emergency type of barracks in this instance.

Mr. RILEY. What would one barracks cost, the 326-man barracks?

Colonel SHULER. About $600,000—a little higher than that.

Mr. RILEY. The question was, what is the total cost of a 326-man barracks?

Colonel SHULER. $600,000—$611,000.

Mr. RILEY. To have one barracks ——

Mr. ZACKRISON. About $1,670, times 326.

Colonel SHULER. About $611,000 counting utilities.

Mr. RILEY. It is not probable now, leaving out all theories, that this would be a permanent station?

Mr. FOSTER. Mr. Riley, this particular battalion is organized only for an interim mission. We do have permanent barracks built in at Dugway, in the Easy area. These units may be there for only 5 or 10 years. We explored that rather thoroughly before agreeing to build there.

Colonel SHULER. It costs us about two-thirds for the same number of men, as it would to build the permanent type barracks.

Mr. RILEY. If you should have to replace it in 10 years, it would become more expensive.

Colonel SHULER. That would be true; but I come back to this throughout this program—this is something that I would like the committee to remember—that throughout this permanent-construction program our top goal is for permanent peacetime Army strength and not for a strength above that. Our feeling is that we should get pretty close to this goal before we start exploring an increase in the increment, because if we go for the higher goal we are going to add hundreds of millions of dollars to the ultimate requirement, and we feel that we are not safe in doing that at this time.

Mr. RILEY. The thing that occurred to me is that you already have a lot of these temporary buildings that you are now having to replace.

Colonel SHULER. Yes.

Mr. RILEY. Whereas if you should go ahead and build the permanent type, where there is the possibility of their being used, you are really going to save money on maintenance and replacement.

Colonel SHULER. We are doing that generally throughout the program.

Mr. SIKES. These are really semipermanent rather than temporary.

Colonel SHULER. Yes; these are concrete blocks, 1 story, with a 10- to 15-year roof.

Mr. ZACKRISON. Fifteen-year life.

Colonel SHULER. That is a well-planned building.

Mr. SIKES. The temporary buildings that you are pulling down now were 5-year life buildings.

Colonel SHULER. Yes, sir.

Mr. SIKES. So when you put up a 10- to 15-year life building, if you get 15 years out of 10, maybe this is not so bad.

Mr. RILEY. If they are built out of concrete——

Col. SHULER. These are strictly concrete buildings.

Mr. RILEY. You have a lot of salvage there, but I have my doubts about the economy of this so-called 10- to 15-year structure, because you pay for them twice during the period they are used.

Colonel SHULER. I will tell you what this building is—you have seen hundreds of them. In industrial plants you will find a lot of them, one-story concrete block buildings, concrete slab floors with a good solid roof on it. That is the same kind of building. That will probably be there for a lot longer than 15 years, if they are taken care of.

Mr. SIKES. But they do not have the same kind of accommodations, or the same space for the men that the permanent type has.

Colonel SHULER. That is right; there are 60 square feet, instead of 72 square feet allowance per man as in the permanent buildings.

TEST EQUIPMENT MAINTENANCE SHOP

Colonel SHULER. The next item at Dugway Proving Ground, Utah, is a test equipment maintenance shop, $119,000.

Field testing of Chemical Corps end items is the mission of Dugway Proving Ground, and results depend on the accuracy and reliability of test equipment used. Equipment assembled into samplers combines delicate glass tubes, electronic equipment, and vacuum pumps operated by batteries or commercial power. In this building, glass tubes are gaged for accuracy before and after each test, solvent is added and timing and calibration of electronic equipment in each individual sampler is checked and certified to the field.

The reason I am putting this in the record is to show that this is an operation that is quite delicate and out of the ordinary, and that is the main reason why we need this type of construction. If anything goes wrong on these samplers, we can have a waste of $10 to $25,000 in a single test.

Mr. RILEY. In other words, this is a specially designed facility?

Colonel SHULER. Yes, this is a specially designed facility.

FAMILY QUARTERS

The next to the last item at Dugway Proving Ground is a request for $232,000 for family quarters, broken down into 14 noncommissioned officers' quarters and 2 commissioned officers' quarters. The total requirement at Dugway, which is an isolated station 86 miles southwest of Salt Lake City, is 495. We have 430, which gives us a deficiency of 65, but being such an isolated station we feel we should work into this additional deficiency. This would give us 16 more sets of quarters.

Mr. MILLER. Do you have two generals out there?

Colonel SHULER. This is for a general or the commanding officer. The commanding officer may not be a general.

Mr. MILLER. You said two.

Colonel SHULER. Two for general or commanding officer. The commanding officer could be a colonel.

Mr. MILLER. It seems like a rather small location. I wondered why you had to have two topflight officers' houses.

Colonel SHULER. The mission is large-scale field testing and evaluation of items developed by the Chemical Corps in the fields of chemical, biological, and radiological warfare. In other words, it is a top level mission.

Mr. MILLER. I still don't understand why you need two top flight officers' quarters.

Colonel SHULER. I will have to furnish that, and I shall be very glad to. It is an important mission and you probably have a post commander and a commanding general as far as the mission of research goes. That would be my guess, but I would like to check it for accuracy.

(The following information was subsequently supplied:)

One set of quarters is for the commanding officer. The second set is for the chief scientific advisor, a key scientist of civilian grade commensurate with that of a general officer. The Department of the Army feels that adequate quarters are necessary if men of this caliber are to be retained in the Government service.

Mr. MILLER. What would be the cost for the general or commanding officer's quarters?

Colonel SHULER. The average cost is $26,400, which includes utilities and everything. That compares with $12,075 for noncommissioned officer's quarters.

Mr. MILLER. In other words, the general or commanding officer's quarters costs a little more than twice as much as the noncommissioned officers' quarters?

Colonel SHULER. Yes, about twice the square footage and about twice the cost.

ADDITION TO STATION HOSPITAL

The last item at Dugway is an addition to the station hospital. It is strictly an isolation ward. This has to do with the fact that we are testing new agents at Dugway Proving Ground, and inasmuch as approximately 40 people are involved in a test at one time, it is possible that as many as 18 men might become hospitalized concurrently. Treatment requires the most modern and complete isolation facilities. It is a high cost building. You will note the cost is $31.20 per foot, which is high. This building involves reenforced concrete footings, foundation and frame; concrete block interior and exterior walls. It is designed to provide space for a private bath for each room, an airing porch, kitchens, doctors' offices, nurse and orderly room, bacteriology laboratory, serology laboratory, and clinical laboratory, including air conditioning and special hospital equipment.

PINE BLUFF ARSENAL, ARK.

The next station is Pine Bluff Arsenal, Ark. That is the item I described before the full committee for the acquisition of 29 acres of land for $3,000. That land acquisition is required for correcting a stream contamination condition. This stream serves as a natural waste water drain from manufacturing areas. It crosses a small section of private property in its course to the Arkansas River, where toxic wastes are dispersed and diluted. Toxic wastes generated by arsenal operations have contaminated the stream. We would take

over this land and fence it off and keep the livestock from grazing there. This is far less costly than diverting it or any other method.

Rocky Mountain Arsenal, Colo.

The next station is the Rocky Mountain Arsenal located in Colorado. This request includes three items: a loading dock with dunnage shop, $158,000; a decontamination and reconditioning building, $119,000; and improvements to process water system, $496,000.

LOADING DOCK WITH DUNNAGE SHOP

Loading dock facilities for the storage area are improvised measures located in the plants area. Dunnage used in loading munitions shipped in railroad cars is fabricated in the carpenter shop approximately 1.5 miles from the loading point. This project will provide an integrated facility advantageously located near the storage area, thus reducing long truck hauls and permitting work in inclement weather; it will permit the use of fork lift equipment at the railroad siding, and enable the expeditious handling of emergency and peak loads. We have studied this, and the studies indicate an average savings of 73 cents per ton handled, by putting this facility in. The average number of tons received and shipped per year is 30,092.

DECONTAMINATION AND RECONDITIONING BUILDING

The next item at this same station is a decontamination and reconditioning building. This facility is needed to support the nerve gas program and normal depot supply operations. No facilities are available for the decontamination and reconditioning of valuable steel ton containers 30 inches by 80 inches that weigh 1,310 pounds empty. These containers are used for bulk storage and transportation of nerve gas and hazardous toxics. This project is for the decontamination and reconditioning of these contaminated chemical containers and shells. The chemical properties of nerve gas make it essential that the containers be completely decontaminated and reconditioned.

I would like to talk about the savings in this project just a moment. New containers cost $299 each. Decontamination and reconditioning costs $40 each. So the savings of decontamination and reconditioning over purchase of new containers are $259 each, and at this rate we only have to do 456 containers to amortize the cost of this project, so it is a very worthwhile project.

Mr. Sikes. Are all the containers a total loss at present?

Colonel Shuler. Unless they are decontaminated and reconditioned.

Mr. Sikes. And they are not decontaminated and reconditioned at this time?

Colonel Shuler. I believe not, but before I answer that as an absolute fact I would like to check.

Mr. Sikes. If they are being decontaminated and reconditioned now, that saving would not exist.

Mr. Foster. They are not doing that not. They are building up a backlog anticipating the construction of this facility.

Mr. MILLER. It is possible that there is a certain age when this has to be done and maybe they have not had to be doing many yet.

Mr. SIKES. You have not been destroying them?

Colonel SHULER. No.

Mr. SIKES. You have been anticipating the building would be available?

Mr. FOSTER. Yes, sir.

Mr. SIKES. In a normal year how many would you have to decontaminate? I am talking about the normal operation.

Colonel SHULER. There are approximately 12,700 filled and 10,200 empty containers at the Rocky Mountain Arsenal, a total of 22,900 containers with a current replacement value of $6,847,100. The estimated project cost of $119,000 represents 1.74 percent of this investment.

The only question I cannot answer specifically, and I will get the answer for you, is whether we have thus far decontaminated any of the containers.

Mr. SIKES. And the normal yearly output. In any event, it looks like a good investment.

Colonel SHULER. Yes.

(The information requested is as follows:)

(*a*) The capacity of the proposed facility is 750 ton containers per month (one shift per day basis). Because of safety considerations the facility is not planned to operate on a sustained basis and would probably never operate more than one shift per day. There are now 9,000 empty containers at Rocky Mountain Arsenal which will require decontamination prior to filling. There are approximately 6,000 containers filled with agent which will have to be decontaminated when emptied.

(*b*) No ton containers are being decontaminated at this time. Present needs are being met by new containers which are available.

(*c*) All ton containers must be decontaminated before reuse. Therefore, there will be a continuing requirement for this facility.

IMPROVEMENTS TO PROCESS WATER SYSTEM

The next item at Rocky Mountain Arsenal is improvements to process water system, $496,000.

This project is required to correct critical deficiencies in the process water system. The system, designed for the original arsenal, pumps process water from storage reservoirs to plants area and certain isolated areas. The 36-inch diameter transmission lines designed to feed the network of mains in the plants area is now required to support a new incendiary oil plant through a 12-inch diameter main installed at the end of the original water system.

The principal deficiencies in the existing system are low pressure conditions in the east plants area due to added demands placed upon the original system; lack of pressure in outlying areas at times of peak demand; lack of storage volume resulting in insufficient cooling of process and condensed water; inadequate pressure for fire protection; lack of emergency storage; and lack of standby pumping facilities.

The various elements of the proposed project have been designed to provide emergency storage and adequate pressure in the area.

Signal Corps Facilities

Department of the Army Transmitting Station, Va.

That takes us, sir, to the Signal Corps, and the first station is on page 22 of the Family Housing book, Department of the Army Transmitting Station, Va. The request is for 10 sets.

This station is 2 miles southwest of Woodbridge, Va. This request is broken down into 8 noncommissioned officers' quarters and 2 company grade quarters, plus site preparation, utilities, walks, and so forth, a total of $164,000 including the utilities, ranges, refrigerators, and telephones.

The total requirement there is for 16. We have 1 set there, so the deficiency is 15. These are 100 percent new facilities.

That is all at that particular station.

Decatur Signal Depot, Ill.

The next station is Decatur Signal Depot, Ill. There is 1 item at that depot, firewalls, $303,000. The construction of firewalls in the main warehouse is required to lessen the danger of large fires and permit greater protection to the material stored. Areas between existing firewalls in this warehouse are 300,000 square feet, 215,000 square feet, and 180,000 square feet. Areas recommended by the National Board of Fire Underwriters should not exceed 80,000 square feet for maximum safety. Construction of these firewalls will increase the protection of critical items in this warehouse valued at $200 million.

Fort Huachuca, Ariz.

The next station is the electronic warfare station of the Signal Corps, Fort Huachuca, Ariz. It is roughly 80 miles below Tucson, Ariz., and 43 miles northwest of Bisbee, purposely located out there because of the need for an isolated place.

The items we are asking for at this station are a control tower ($100,000); a hangar for rotary wing Army aircraft ($631,000); an operations building ($49,000); an addition to the concrete apron ($137,000); a fire and rescue building ($34,000); extension of utilities ($180,000); 4 aircraft fuel storage tanks ($64,000); and a warehouse ($133,000), a total of $1,328,000, and in addition to that we are asking for appropriations of $6,219,000 to fund 450 sets of family quarters, 200 of which are unfunded appropriations from last year and 250 new authorizations.

control tower

First I will take up the control tower, $100,000, on page 95 of the big book. This is to give us flight safety for flying operations. The planned volume of traffic, 200 to 300 flights in and out daily, will represent the third largest traffic load of any Army airfield. Among the missions of this station is the mission assigned to the Signal Corps, principally battlefield surveillance.

The existing facilities consist of 1 inadequate 25-foot tower of temporary type wood construction, nonfireproof, built in 1952 and not weatherproof.

HANGAR (ROTO WING)

The next item at Fort Huachuca is a hangar for rotary wing Army aircraft. The reactivation of this installation—it was at one time, prior to the Korean war, inactivated and during the Korean war it was rebuilt by doing work on a temporary basis and adding to the facilities, and it was made permanent about 2 years ago and the permanent construction is just beginning.

Reactivation of this installation with a new mission has created the need for the proposed facility to service approximately 21 helicopters assigned for experimental work. The helicopters vary in size, up to and including H–16. The present facilities, consisting of an emergency type frame hangar 64 feet by 88 feet and a metal hangar 60 feet by 100 feet do not have sufficient height to accommodate the various helicopters. The existing hangars will be retained for fixed wing aircraft maintenance.

Mr. MILLER. I notice some of this land is owned by the State. Is any of this construction going on on land that is not owned by the Federal Government?

Colonel SHULER. All the construction is going on land that is owned in fee by the Federal Government.

OPERATIONS BUILDING

The next item is an operations building. This project is required to provide necessary space for airfield flight operations. The existing 1,200 square foot modified emergency type building provides space for only 1 teletype machine, whereas the requirement is for 4, and does not include parachute storage, weather-briefing area, supply storage, map room, and pilot readyroom. In addition to the foregoing, the proposed facility will include flight operations dispatch office, flight-records office, weather station, and other offices required for an operation involving 55 fixed and rotary wing aircraft and approximately 200 personnel. Upon completion of the proposed facility, the existing building will be salvaged. The number of planned flights in and out daily is 200 to 300.

ADDITION TO CONCRETE APRON

The next item is addition to concrete apron, page 98. This project is required to increase the capacity of parking space from 14 to 55 aircraft. Fifty-five fixed and rotary wing aircraft will be based on this installation as the result of the new mission assigned.

FIRE AND RESCUE BUILDING

The next item is a fire and rescue building, page 99.

No fire and rescue facilities are available for the airfield at present. The planned number of flights in and out daily is 200 to 300. It is essential that these facilities be provided at the airfield where 55 aircraft, including fixed and rotary wing types, will be based by January 1956. That is our target date for getting up to 55 aircraft.

EXTENSION OF UTILITIES

The next item is extension of utilities. There are no sanitary sewers or gaslines serving the airfield. Water is being piped through a temporary waterline to the field. Electrical distribution is single phase and not suitable for expansion. The utilities will serve an operations building, 2 aircraft hangars, 1 electronic shop hangar, a fire and rescue facility, and a field maintenance activity which provides service for 55 fixed and rotary wing aircraft, and approximately 200 personnel.

AIRCRAFT FUEL STORAGE TANKS

The next item is four aircraft fuel storage tanks. The 4 tanks will provide storage for the 4 grades of fuel necessary to service 21 helicopters from the H–13 to the H–16 in size, and 34 fixed wing aircraft including 6 L–17 drones and a C–46. Four 15,000 gallon tanks will provide capacity to unload railroad tank cars and thus save on demurrage charges. The estimated monthly fuel requirement is 60,000 gallons.

WAREHOUSE WITH RAILROAD SPUR

The next item is a warehouse with railroad spur. This warehouse is for the storage of sensitive and delicate electronic equipment used in connection with the mission at Fort Huachuca. The facility is required to provide storage for 30,125 measured tons of supplies and equipment for testing and evaluation projects. All existing warehouse space is fully utilized and incoming equipment is stored in tents and under tarpaulins. Such storage is unsatisfactory for electronic equipment, as rapidly changing temperatures cause moisture condensation in components, while dust and sand particles prevent proper operation of moving parts. We have a lot of dust and sand at this station.

May I say something off the record?

(Discussion off the record.)

Mr. SIKES. What activities are presently being carried on at Fort Huachuca?

Colonel SHULER. The mission at Fort Huachuca is in the fields of electronic warfare, battlefield surveillance, Signal Corps aviation, meteorology and related activities.

Mr. SIKES. How long has that been the case?

Colonel SHULER. A little over a year. I might add a number of these missions were moved from Fort Monmouth.

Mr. SIKES. This essentially is a new operation you have moved into Fort Huachuca?

Colonel SHULER. Yes.

Mr. SIKES. It is costing a lot of money because you apparently had very little to start with out there?

Colonel SHULER. We had no permanent construction out there to start with.

Mr. SIKES. How did you happen to select this area since it is necessary to start almost from scratch in developing the facilities?

Colonel SHULER. For two reasons. One was, it was getting too crowded at Fort Monmouth, which essentially is the Signal Corps school. The second reason is that this type of installation disturbs

any electronic installation anywhere near it, and we had to find a place where we would not disturb other electronic facilities and where our electronic experimentation would not be disturbed.

Mr. SIKES. Where is Fort Huachuca?

Mr. FOSTER. Right near the Mexican border.

Colonel SHULER. That is an old establishment. Some of the buildings date back to 1881, still made out of adobe. It is an isolated station, and that is one of the main reasons why it was chosen.

Mr. SIKES. It appears to me it is costing you a lot of money to go there because of the cost of family units and other items. Were there no other installations in isolated areas where you could have avoided this expense?

Colonel SHULER. I know this was carefully studied by the Chief of the Signal Corps and the Secretary of the Army, and this was chosen because it is so hard to find a place that is 80 miles from a city like Tucson, which still is not a large city. We feel the isolation was necessary, sir, and that is why we went in there.

Mr. SIKES. All right. Go ahead.

LEXINGTON SIGNAL DEPOT, KY.

Colonel SHULER. The next station is Lexington Signal Depot, Ky. We are asking for two items. One is a nucleonics building, $369,000; and the other is 9 family quarters, $169,000.

NUCLEONICS BUILDING

The first item is the nucleonics building, and I would like to mention that this is 1 of 2. The other, which is exactly the same, will be at the Sacramento Signal Depot, which I will come to a little later.

This mission is a Signal Corps responsibility for the procurement, storage, issue, and maintenance of all nuclear radiation detection instruments used by Army field forces. This new mission requires special techniques and facilities in repair, calibrations, tests, and attendant safety measures. The hazards involved in handling of radiation calibration source, which is your gamma-ray type, in the course of calibrating and testing are sometimes lethal if not handled properly, and therefore maximum protection of personnel is a requisite. The need is not being met at the present time, although unsafe, improvised dispersed operations have been set up in temporary unheated wood buildings. Some tests and repairs cannot be made under present conditions.

This will give us facilities which we need. I have some other data if the chairman desires it.

Mr. SIKES. You might put that in the record.

(Information requested is as follows:)

The functions to be performed in the proposed nucleonics building, Lexington Signal Depot cannot be economically accomplished by commercial contract for following reasons:

1. Commercial repair is not economical as the quantities of radic instruments accumulated at any one time for calibration, testing, and repair does not provide a profit sufficient to interest a suitable supplier.

2. The radic instruments involved are not homogeneous and a repair contractor would find it impractical to store repair parts sufficient to produce a short "turn-around" repair period on an open-end contract.

3. The requirements on the nucleonics activity are sporadic in numbers and varied in type.

FAMILY QUARTERS

Colonel SHULER. The next is nine sets of family quarters at the last signal depot. These 9 sets are broken down into 4 company grades, 4 field grades, and one general, or commanding officer, for a total of $169,000. We have 163 required; we have no assets; we have a deficit of 100 percent, and this is the first increment in that deficiency.

FORT MONMOUTH, N. J.

The next station is Fort Monmouth, N. J., two items: Branch post exchange and a chapel. The total amount of money for these 2 items is $615,000, requested.

BRANCH POST EXCHANGE

The first item, branch post exchange, $82,000, is to provide an exchange service for the 3,000 enlisted men, assigned to the new permanent barracks. Actually this will provide 4,000 square feet where our total requirements based on the permanent peacetime army is 8,000. Temporary exchange facilities to furnish minimum service for the troops are now provided in the basement of the new school building which prevents the use of the space for school purposes. There is no other space available in this area for the post exchange.

We would like to move out of the school building and into this new post exchange.

CHAPEL

The next item is a chapel, 600 seat chapel, $533,000. This is to provide a permanent post chapel, 600 seats, of a total required of 900, for the permanent peacetime Army. We have nothing permanent at the present time. It will be accessible to military dependents, and all faiths may worship in this chapel. Presently there is a limited seating capacity of 1,680 square feet in each of four existing mobilization type chapels, previously built in 1940, which does not encourage attendance, and which increases the number of services required. In addition, this creates a problem of securing organists and teachers.

This is a permanent post chapel.

SACRAMENTO SIGNAL DEPOT, CALIF.

The next station is the Sacramento Signal Depot, three items: This is the other nucleonic building, costing $417,000 which I mentioned earlier, as being at Sacramento Signal Depot.

One enlisted men's barracks. This barracks request is a deficiency authorization. This is the place where the bids were so high, sir, due to conditions requiring foundation piling and so forth, that our costs ran up, and we are asking for this enlisted men's barracks, 263 spaces, and additional authorization and appropriation in the amount of $140,000.

Then we have an item for 10 sets of family quarters.

The first item——

Mr. MILLER (interposing). Why do you depart from your new scheme; why is the 263 spaces called for when you had moved to the 326-space type of construction?

Colonel SHULER. I believe at this particular station, that is all that we need in the way of spaces.

Mr. MILLER. That is why you reduced the barracks requirements?

Colonel SHULER. Yes. The permanent barracks requirements, referring to the permanent enlisted strength, is 399. Multiplying that by 81 percent, which is what we use in determining barracks requirements, is covered by the 263-man barracks that we are proposing to build. We would be overbuilt if we built the 326-man barracks.

The first item, the nucleonic building, as I described before, has to do with the procurement, storage, issuance and maintenance of the nuclear radiation detection instruments, and, with your permission, Mr. Chairman, I will not go into that any further, since I explained it fully before.

Mr. SIKES. Very well.

ENLISTED MEN'S BARRACKS

Concerning the enlisted men's barracks, we got a low bid of $632,000 which runs us $2,285 per man. Therefore, we are back to get a raise in the authorization and funds to cover that, because we feel that is a fair bid and we do not feel we can lower the price there, sir.

The last item is 10 sets of family quarters: those are 4 noncommissioned officers; 3 company grade, and 3 field grades, $158,000 total.

We have 143 required; we have no assets; we have 100 percent deficiency.

TOBYHANNA SIGNAL DEPOT, PA.

The next is Tobyhanna Signal Depot where we are asking for one enlisted men's barracks, 326-man barracks, $649,000. We do not have the troops there but they will be assigned there when the barracks is built. We would like to get the barracks built and then put the troops there.

Mr. SIKES. What is their mission?

Colonel SHULER. These barracks are required to provide permanent housing for four Signal Corps TO&E units to be assigned at the Tobyhanna Signal Depot for training in signal maintenance and supply operations, a new mission for the depot.

Mr. FLOOD. Colonel, I want to inquire about this Tobyhanna problem. While this installation is not actually in my congressional district, it is right on the edge of it.

Colonel SHULER. Yes.

Mr. FLOOD. And it is in the congressional district of Congressman Walters, of Pennsylvania. He was greatly instrumental, as you recall, in having this installation established there, and as this was his baby, he was very much concerned about it going there. And I am, too, for a number of reasons.

I made an official inspection tour up there a few weeks ago, spent all day there with the retiring commanding officer, Colonel Anderson—I think you know or have heard about it.

Colonel SHULER. I took the matter up with General Lawton at some length, wrote him at some length about it, and then he and I were in touch with the engineers about it.

Mr. FLOOD. I want to be sure that you are paying proper attention to this Tobyhanna installation, due to the fact that it is permanent, and it is a big Signal Corps installation. This is not just a camp or station. You recall the problem about the condition of the surface of the land; namely, the anchor.

Now, certain funds, as I understand it, are available now from unused funds to immediately start work as of now to anchor that land. What are you doing, what is being done, as of today in connection with guaranteeing that that surface is going to be anchored?

Colonel SHULER. Mr. Flood, I am not prepared at the moment to give you a full answer to that, but I do know that several hundreds of thousands of dollars are being made available.

Mr. FLOOD. That is right.

Colonel SHULER. To alleviate the condition you speak about at Tobyhanna, and that work will be done. That is the story I have.

Mr. FLOOD. That is from funds that are available now, and not exhausted from the current fiscal year funds.

Colonel SHULER. Those are funds within the station's allowance, plus the 5 percent we are allowed to go above.

Mr. FLOOD. Very well.

Colonel SHULER. Which will give us funds to go into that.

Mr. FLOOD. I want to be assured that if such funds as we have just been discussing are not available that they be made available in this coming fiscal year, so that we can guarantee that that work will be done.

Believe me that is essential.

Mr. Chairman, I walked over that place, and I spent all day with the people. It is an appalling condition. I do not know whose fault it is, or whose fault it is not, but they had an extremely difficult excavation job there because of so much shale and rock at the surface. Nobody can be criticized for the expenditure of those funds, neither the engineers nor the Army, or the contractor, or anyone else. It was completely an inadvertant and unexplainable situation that developed. We do not propose to criticize anyone, because nothing could have been done about it; it just cost more than was intended. But is that condition going to immediately be corrected, and if you do not have the money, I want it to be placed in this request.

Colonel SHULER. Yes. The last thing I heard was that money was available and the work is going to be started immediately.

Mr. FLOOD. All right. That is on the anchorage problem.

Now, I went through with the civilian and military people, through all their buildings, from one end of that installation to the other, and there are deficiencies, engineering deficiencies, construction deficiencies, that you allowed for, and that must be done there. This is not finished; that is not finished. That contract, in my opinion, was certainly loosely drawn. The man who had the advantage of that contract certainly did not get hurt too much because there were pointed out to me numerous flagrant instances where the contractor, by interpretation of his contract, would simply say, well, I am complying with the contract, and he probably was right. There are cases there where certain of the warehouses, the walks, the steps from the loading platform down to the ground, are in. But then the sidewalk, from the bottom of the steps to the next connecting sidewalk, the main sidewalk is not in. And the contract actually did not provide that

the fill-in sidewalks be placed in. That was an appalling oversight, but the contractor was technically right.

There are a number of instances of that kind of thing on that installation, and I would like to see them corrected now.

It is much more important that those things be done at a place like that, than a lot of things that I have been listening to, today, detailed here, that you say are important to do. But it is a question of your substituting your opinion for mine, out of your total budget; then we have no quarrel. But these are things I saw with my own eyes and they are there.

Colonel SHULER. Mr. Flood, I think everything you have described should be corrected, and I think this will be done rapidly, and I think it has to be done out of two sources of funds; I have been a contracting officer many, many times, and I know, on a job where you have a quarrel with the contractor as to what the plans and specifications call for, you direct him to do the work and settle the matter later on—he may have to do something he may claim he does not like, but he is protected, and the work goes along. Now, that is one way you can handle it.

Certain other minor deficiencies can be corrected with maintenance and operation funds.

Mr. SIKES. Now, you are talking in generalities; and this is something that Mr. Flood would like to have specific information on, with respect to what you propose to do.

Mr. FLOOD. You are not going to have enough maintenance and operating funds to do that.

Colonel SHULER. No, but it will be done with either MCA or M and O funds.

Mr. FLOOD. All right. You have certain funds that General Lawton went to a lot of pains and a lot of trouble to try to help me in getting all the information I could.

Colonel SHULER. I will find out and see that you get a full report immediately in answer to your questions.

Mr. FLOOD. But do not let us delay these hearings on just this one Tobyhanna installation today, but before this committee reports out this bill, I want to be able to assure Congressman Walter and myself and everybody else in northeastern Pennsylvania that these odds and ends, these cats and dogs, in this great installation, that should have been done, and are not done, will be done; and if you do not have the money left over from the maintenance and operation fund—and you will not have enough—then I want to be assured that you will get it in this year's budget, so this work can continue at once.

There are many other things: There is a roadway that was put in around the incinerator or powerplant—and I have forgotten which—and because of the lack of proper landscaping and the failure to anchor the banks around the roadway, the rains and the weather are pushing that roadway right onto the verge of the bank area, and half of your road is now covered up, and in another year, you will not have any roadway; that is ridiculous. That is another thing.

Then on some of those main roads, through the installation: This is on top of mountain, the weather gets very, very cold up there, below zero, many, many weeks out of the year, in a bad year. And I saw where, after certain rains, the protection around the manhole covers and the steam lines is not proper and was very bad. The

water collected in there and the steam comes all over the place and creates a very bad condition.

In addition to that, in the immediate rear of the main headquarters building, there is a small piece of land, owned by the Government, owned by this installation, that the brush and the rocks should be cleaned out of, and it is a natural and very important place, which should be used for the convenience of the thousands of people that work there, weather permitting, to be used as a lunching or recreational area, right 50 or 60 feet from the rear door. There are no funds there to permit that work to be done. I do not think the commanding officer should be burdened with trying to chisel a dollar here and a few dollars there, down through 10 years to do it. It is a simple operation. It is obvious when you look at it that it should be done, and it is one of the kind of things that this committee, and certainly I would like to see done, at a place like this. It is inviting, and it almost spells itself out.

Right in the rear of the main building, he tells me—and you tell me, that the sodding is more expensive, although that is pretty expensive to be done all over the place—but seeding and grass to anchor this surface would be sufficient for most of the area, but in front of the main building, the area should be sodded, not new grass-seed put in there. It is a beautiful approach: it is not a very large area; and the circle aproaching the main office building and the lawn immediately adjacent to the main office building should be properly sodded.

The rest of the entire vast area, of course, would not be expected to be sodded. The areas in between the buildings themselves, and by that, I mean the warehouses and the various operations buildings, no provision has been made, nothing has been done, because of lack of funds, to conduct the seeding and landscaping operations; and that should be done, both as far as appearances are concerned and as an aid to actual operation of the base.

The approaches from the highway, as you enter the base, are at a pitch of about 30° to 45°, long bank exposed to naked yellow dirt, and no provision is made, nothing is being done. That would come, I am sure, under the general surface holding program that you just spoke about a few moments ago, and I am sure you would cover that. And another thing, I walked through those buildings, on a day much hotter than today; the temperature was in the eighties; this was 2 or 3 weeks ago, and it was frightfully hot that day. No human being should be requested to work in that building. It was a furnace room, especially the upstairs area, where the men were doing highly technical, very skilled electronic work, over workbenches, with skylights a few feet over their heads, with burning sun coming down on their workbenches. You would not expect slave labor to work at those benches, in those rooms, under the conditions that I personally saw. And I wager that in the middle of July and August, it will be three times worse. This is June, and it is the next 2 months I speak of. This is the first summer that those men will be exposed to that kind of operation. They have never worked in that facility, those areas of that facility have never been utilized in the summer. But this is the summer, and no care, no preparation is being made, except a splash of whitewash, or some protective paint or something over those windows, and over those areas.

Now, that is not right. That has been left up to the ingenuity of the local men to take care of; that should be your job; somebody should look after that; not some local colonel who will try to save a dollar here or a dollar there out of his own maintenance and operation funds to have that work done. It is too basic and too fundamental. The health, safety, and welfare of those workmen are directly in question in those workbenches, in that entire operating area. It is not so much the main floor, but it is the upper specialized rooms where the skilled and very important work is going on. That should not be permitted to exist, and certainly no longer at this period of time. In addition to that, there are no funds for venetian blinds. There are great areas of exposed glass and the sun beats in there just as though it were down here on the Mall in Washington. And some of you fellows here in Washington have the idea that you can go up to the Pocono Mountains and there is no heat and no sun there; it should not be permitted to exist this summer and if you can beg or borrow funds from any place, those people should be protected, and it should have been done as of this month, not wait for next year.

I take for granted when a member of this subcommittee goes to the pains of inspecting these installations when we are taking your word for 99 percent of these things, these camps, posts, installations, that you have been reciting to us all day; you are dealing with $100 million.

Now, I am reciting one that I went through and you take my word for it.

I saw these things. I have just detailed to you half a dozen items.

In addition, approaching that camp, there is, I think, a deplorable problem of a low, narrow railroad bridge immediately adjacent and contiguous to our camp site.

I do not know how that was permitted to exist in the first place; I do not know why you ever built the camp there until you made some arrangement with the railroad to do something about it, but somebody was derelict, seriously. It is a narrow road. The railroad is a low, comparatively low, overhung entrance, and you will never be able to get decent-sized trucks into your installation over that piece of road, and somebody goofed on that one.

Now, I want to be assured that you are prepared to take some corrective measures, and to examine into that problem and to correct it. I do not know your authority or right of Government over the railroad, to have that work done, whether you can make a deal with the railroad; I do not know how you proceed, but it is a very serious matter. I suppose the railroad will be reluctant to help you, because if they do, they know you are going to run trucks in there, and I suppose they will lose revenue, because their railroads serve your camp. And one of the inviting things in putting the base there, was that the railroad was there.

But the fact remains that when I stood in the middle of the road, and looked at this entrance approach you have there—somebody pulled the wool over your eyes; now it is a reflection upon all of us, if it continues to exist.

Colonel SHULER. May I say something off the record?

(Discussion off the record.)

Mr. SIKES. All right, Colonel.

Colonel SHULER. Could I make one statement, Mr. Flood; the only reason I cannot state this as absolute fact, is because it is not first

hand, but I will say that I have been advised by competent authority, that over $600,000 is being made available immediately to handle the situation you have described. We have it in the record, and I do not think that we have any excuse for not knowing what the items are, because we can read it, and we will make every effort to see that the work is done as rapidly as we can.

Mr. FLOOD. Off the record.

(Discussion off the record.)

Mr. MILLER. This statement indicates that this was taken over by the Army in 1953. Is it not the old Tobyhanna Camp.

Mr. FLOOD. That is right.

Mr. MILLER. Yes.

Mr. FLOOD. This is the old artillery reservation and firing ground and firing range for artillery for many, many years.

Mr. MILLER. For World War I.

Mr. FLOOD. Oh, yes. It was used by the Pennsylvania National Guard for many years until they got their new training camp at Indiantown Gap, but it has been a well-known military reservation for generations. And it was ideal for this kind of a location. But the things that I am talking about are not unusual situations which develop in a large installation, only I would like to see them taken care of right away.

Mr. SIKES. Give us a full story on these matters which Congressman Flood has pointed out and the importance of proceeding immediately, to see that they are taken care of.

(The information requested follows:)

	Original listed estimated cost	M & O 1955		1953 MCA funds available w/district	New 1952–53 MCA funds	CWE	Scheduled award date
		By district engineer	By P. E.				
Final grading and dust control	$597,000				$329,200	$329,200	Aug. 28
Erect guard fence along east access road	14,000	$8,200				8,200	June 30
Construct new access road	65,000				65,000	65,000	Aug. 29
Provide post indicator valves at buildings containing wet pipe sprinkler systems	12,000			$12,000		12,000	(1)
Provide 8 additional valves on water-distribution system	16,000				32,000	32,000	(1)
Protect 10 fire hydrants	1,500	2,350				2,350	June 30
Provide electric lights at 2 sewage lift stations	600			600		600	(1)
Make following changes at sewage-treatment plant: Submerge suction lines; make provisions to prevent sludge in riser from freezing	8,000			8,000		8,000	Oct. 26
Make following changes in electrical distribution system:							
Relocate wires over utility yard flammable-storage building	1,500			1,500		1,500	(1)
Provide intermediate poles between poles 107, 109, 111, 113, 115, and 117 and existing poles	2,500			2,500		2,500	(1)
Rewire equipment on pole 93	500			500		500	(1)
Provide protective roof over transformer banks in buildings	5,300				10,000	10,000	Oct. 26
Repair concrete slabs and foundations	38,000			38,000		38,000	Do.
Replace clear glass with wire glass in all windows adjacent to firewalls	31,600				31,600	31,600	Do.
Provide concrete walls to personnel doors in warehouses, shops, and cafeteria	11,600				11,600	11,600	Do.
Paint soffits of platform canopies at buildings Nos. 1a, 1b, 1c, 4, 5, and 6	28,000			28,000		28,000	Do.
Close gaps at heads of windows	1,200			1,200		1,200	Do.
Master operations building:							
Where 2 sprinkler systems are located in 1 valve pit, provide separate restricted bypasses for each system	700				700	700	Do.
Enclose space between top of existing wall and underside of roof and ceiling at hallway of laboratory and at north wall of ladies room	500				500	500	Do.
Insulate horizontal runs of copper cold-water pipes and vertical runs commencing at 6 feet from floor	3,000				3,000	3,000	Do.
Provide pipe rail barrier around transformer banks on west sides of shop area on main floor	500				1,000	1,000	Do.
Provide sprinkler protection in paint spray booths, in ducts, and beneath wide portion of air-conditioning ducts in stockroom and optical room	4,000				4,000	4,000	Do.
Provide guard rail and reduce floor area at return air duct in equipment room	300				300	300	Do.
Provide a partition for mezzanine in bay 3, building 1b, similar to bay 6, mezzanine	6,300				6,300	6,300	Do.
Repair exterior block walls at offices of warehouses 2, 3, 7, and 8	2,000			2,000		2,000	Do.
Replace ceiling in snack bar of cable-processing building with ⅛-inch cement asbestos board	2,500			2,500		2,500	Do.
Administration building:							
Provide evacuation alarms	14,000				14,000	14,000	Do.
Increase exhaust from air-conditioned room	5,000				5,000	5,000	Do.
Provide additional heat and light in dispensary	5,800				5,800	5,800	Do.
Insulate cold water lines	20,000				20,000	20,000	Do.
Install grease resistant asphalt tile in kitchen of cafeteria	8,500				8,500	8,500	Do.
Install venetian blinds	28,700		$25,000			25,000	June 30
Provide gutters and downspouts at entrance of wings B, C, and D and at main entrance	700			700		700	Oct. 26

See footnotes at end of table, p. 69.

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	Original listed estimated cost	M & O 1955		1953 MCA funds available w/district	New 1952–53 MCA funds	CWE	Scheduled award date
		By district engineer	By P. E.				
Boiler plant:							
Waterproof surge tank	$5,000			$5,000		$5,000	Oct. 26
Install dustless unloader at ash silo	16,200				$16,200	16,200	Do.
Miscellaneous changes consisting of the controls for ash disposal system to operating floor, provide testing equipment, provide an enclosure for conducting tests and provide a sheet metal pan beneath the coal flight conveyor. Added: Provide bypass connection to feed water heater between surge tank and feed pumps; provide unit heaters; provide makeup water meter	4,000				7,500	7,500	Do.
Flammable storage building:							
Construct fireproof room, with opening from the outside to house the dry-type transformer, main 480-volt fused switch and other feeder safety switches	800				800	800	Do.
Move present lighting panel to office and install seal-off fitting at all branch and feeder circuits							
Make all thermostats explosiveproof							
Install seal-off fittings on all circuits and on each side of any switch or thermostat that breaks any circuit	6,000				6,000	6,000	Do.
Install bonding jumpers or other approved fitting in all present ceiling light outlet boxes							
Change all puss boxes less than 5 feet from floor to explosion-proof	300				300	300	Do.
Fire station:							
Provide exterior lean-to in side of building and move storage batteries into lean-to	2,000				2,000	2,000	(1)
Provide partition between sleeping and recereation areas	1,000				1,000	1,000	(1)
Refrigerated storage building:							
Ventilate equipment room	2,000			2,000		2,000	Oct. 26
Make main doors double acting and heavy up counterweights	4,000			4,000		4,000	Do.
Alter fire doors to conform to directions given in Military Construction Engineer Bulletin No. 54–16, dated Apr. 11, 1954	126,000				26,000	26,000	Do.
Vehicular processing building:							
Cover gap between firewall and exterior wall with steel plate	2,100				2,100	2,100	Do.
Replace clear glass with wire glass in windows where firewall joins exterior wall	2,600				2,600	2,600	Do.
Eliminate sharp dip in Avenue B	2,000	$1,200				1,200	June 30
Provide additional roof drains on box shop	1,500				1,500	1,500	Oct. 26
Correct roof drainage on master operations and administration buildings	5,000				5,000	5,000	Do.
Provide additional valves on steam distribution system	6,000			6,000		6,000	Do.
Complete class B road to incinerator to provide U to Avenue B	3,000				3,000	3,000	Do.
Waterproof all steam manholes and 1 communications system manhole which is immediately west of guard-control building	37,000			37,000		37,000	Do.
Place underground the present electric distribution and street lighting systems on street Nos. 3 and 4 (Note: Changed to provide for elevation of those systems in specific area to eliminate present hazard)	183,000			7,500		7,500	Do.

Boiler plant:							
Relocate existing 3-inch hand-feed valve to front of boilers and equip same with chains	300			300		300	Do.
Increase size of drain line at blowoff tank from 2½ to 6 inches	1,000			1,000		1,000	Do.
Replace existing 4-inch pressure gage on deaerator with an 8½-inch compound gage mounted on column at operating platform level	100			100		100	Do.
Provide additional air supply in plating shop of base maintenance shop	2,000				2,000	2,000	Do.
Provide a 3,000-pound capacity hydraulic elevator and steel stairway adjacent thereto in base maintenance shop	22,000				22,000	22,000	Do.
Added items:							
Provide wall ties to exterior columns				1,000		1,000	Do.
Provide additional sectionalizing switches and tie-in connections in warehouses area				5,000		5,000	Do.
Install dust collectors for each of 4 boilers				20,000		20,000	Do.
Total		11,750	$25,000	186,400	[2] 646,500	869,650	

[1] Items to be accomplished by Post Engineer. Funds are being transferred to commanding officer Tobyhanna Signal Depot to permit immediate start of work.

[2] Approved by BOB on June 24, 1955.

UNIVERSITY OF MICHIGAN LIBRARIES

(NOTE.—See p. 73 for additional testimony on this project.)

ARMY SECURITY AGENCY FACILITIES

Colonel SHULER. The next two stations are Army Security Agency stations that are highly classified and most of the discussion will be off the record, if you desire it.

Mr. SIKES. Very well.

(Off the record discussion.)

TWO ROCK RANCH STATION, CALIF.

Colonel SHULER. The first station is Two Rock Ranch, located in Marin and Sonoma Counties, Calif., 10 miles west of the little town of Petaluma, Calif. We are asking for three items, plus family housing.

The first item is a gymnasium with a bowling alley ($244,000); the second is a special service building ($88,000), and the third is an enlisted men's and noncommissioned officers service club with guesthouse ($163,000). The fourth is 69 sets of family quarters, and the appropriation request is $956,000 for the family quarters, and is broken down, $153,000 against Public Law 765, 83d Congress; and $803,000 of funds under new authorization which we have requested.

GYMNASIUM WITH BOWLING ALLEYS

The first item is the gymnasium with bowling alley. This is an isolated station, sir. These men, as you can imagine, are on quite intensive duty, and we feel there is a special reason why they should have recreational facilities. This particular building would provide indoor recreation and physical training facilities for this installation. We have no such facilities now except one 2-lane bowling alley, housed in a 13-year-old temporary building, 20 by 100 feet, which does not allow for team bowling, provide space for lockers, storage of equipment or seating.

Mr. SIKES. How many alleys will be provided in this new building?

Colonel SHULER. This would provide, sir——

Mr. SIKES. Just two alleys?

Colonel SHULER. Two bowling alleys, 1,500 square feet.

Mr. SIKES. You will not be any better off, except for having a newer building.

Colonel SHULER. The alleys would be taken out of this building and put in the new building, when we get the new building, and the rest of it would be for storage of equipment, for additional seats and for team bowling. You would still have the same two alleys.

SPECIAL SERVICE BUILDING

The next item, special services building, $88,000. This facility is required for housing administrative offices and supply rooms for special services, with craft shops—T. I. and E. room, that is, troops, information and educational classrooms, and an administrative reference and record section, and the installation library.

The activities are presently in a 20 by 100 foot TO-type building, constructed in 1946, except for the T. I. and E. office, which is located in a 10- by 10-foot room in the rear of the post theater. This building

would consolidate these, sir, and would give us a special service office and a spare room, T. I. and E., educational center, craft shop, and library.

ENLISTED MEN AND NONCOMMISSIONED OFFICERS CLUB

The next item is an enlisted men and noncommissioned officer's service club, with a guest house, $163,000.

This is in accordance with our criteria allowed under regulation 415–31, with special consideration for the remoteness of the installation.

The proposed structure is required to house facilities for recreation, dining, and overnight transients who are relatives and friends of assigned military personnel. The only existing facility is a noncommissioned officer open mess occupying a 20- by 100-foot TO-type building constructed in 1942, which, because of the structural weaknesses, presents a safety hazard and is scheduled for demolition upon completion of the proposed facility.

Mr. SIKES. I notice you have listed a guest house, 8 rooms, at 150 square feet. What do you mean by that?

Mr. FOSTER. Mr. Chairman, these are facilities for the wives and members of the family.

Mr. SIKES. I understand that, but you have 8 rooms at 150 square feet.

Colonel SHULER. Yes; about 12 feet by 12 feet.

Mr. SIKES. Each room is going to be 150 square feet?

Mr. FOSTER. Yes; about 12 by 12 feet.

Mr. SIKES. Each of those rooms is supposed to accommodate a family?

Colonel SHULER. These would be for guests, maybe for the enlisted man's mother or his father; and if he had both of them, they might put one in one room and one in another; but we figure that the eight rooms will alleviate the situation to some degree.

FAMILY QUARTERS

The next item is for 69 sets of family quarters at the Two Rock Ranch.

The total requirement for this station is for 95 sets. We have 12 sets of assets and 84 sets deficient. And this would be an increment in alleviating that condition.

I wonder, with the chairman's permission, if we could finish with the other items and that will bring us to the beginning of the engineers.

Mr. RILEY. Yes.

Mr. SIKES. All right.

VINT HILL FARMS STATION, VA.

Colonel SHULER. The other Army security agency station is at Vint Hill Farms, Va. We are asking for four facilities, a post engineer composite building ($251,000); noncommissioned officer mess ($123,000); and warehouse ($116,000); and an enlisted men's service club and recreation center ($205,000).

The first item—and this is also an ASA station——

Mr. MILLER. Are all these stations doing the same general mission?

Colonel SHULER. That is right, sir.

Mr. MILLER. One is in the West and one in the East?

Colonel SHULER. Yes.

The first item is the "Post engineer composite building"; that consists of administrative space, warehousing, paint shop, electric shop, carpenter and woodwork shop, roads and grounds shop, heating, plumbing, and sheet metal, refrigerating and air-conditioning shop and highway equipment and machine shop. Those all make up this composite building.

The proposed facility is required to provide shop space for the various post engineer activities. Presently activities occupy 9,730 square feet of temporary-type structures, some are former farm stables, which were erected at various times between 1920 and 1942. Upon completion of the proposed facility, we propose to demolish the old buildings.

NCO OPEN MESS

The next item is the noncommissioned officer open mess, $123,000. The proposed structure is required to provide dining facilities and recreational activities for the noncommissioned officers assigned to this installation. The present facility is housed in a 4,838 square foot TO-type structure, built in 1942. Upon completion of the proposed structure, the existing building will be scheduled for demolition and the equipment salvaged for possible reuse.

WAREHOUSE

The third item is the warehouse. And I might point out that this is to be used to store very complex and expensive equipment, as you can well imagine from the mission. The project is required to provide storage and protection of classified supplies and equipment. Material involved was developed specifically for the type of operation carried out by this installation and constitutes an operational and emergency reserve. The special equipment is now under procurement and the storage space is required for the latter part of the fiscal year 1956. All existing warehouses are filled to capacity at the present time.

ENLISTED MEN'S SERVICE CLUB AND RECREATION CENTER

The last item is for the enlisted men's service club and recreational center; this will be a service club of 7,000 square feet; bowling center of 3 alleys, 2,400 square feet; library, 1,500 square feet; craft shop, 1,800 square feet.

The total cost is $205,000.

This project is required to provide off-duty recreation facilities for personnel of this command.

Presently these facilities occupy four separate tar-paper shacks, built in 1942. The existing bowling alleys are located in 2,300 square feet of the post exchange building.

The craft shop occupies 1,800 square feet of a 3,192-square-foot building. The club and the library occupy a temporary building, not centrally located.

Upon completion of the proposed facility, existing facilities will be disposed of as follows:

The enlisted men's club and library, demolished; the craft shop salvaged; and the bowling center placed on surplus list for disposal.

That completes the Corps of Engineers, Mr. Chairman.

Tobyhanna Signal Depot, Pa.

Mr. Flood. Mr. Chairman, may we go back for a few questions I would like to ask under the Tobyhanna installation? (Note: See p. 61 for previous testimony on this project.)

Mr. Sikes. Yes, Mr. Flood?

Mr. Flood. Colonel, in view of the fact that you are building an enlisted men's barracks, at Tobyhanna, and in view of the additional fact that the men are not there now, the enlisted personnel, and that they will move in as soon as you finish the barracks——

Colonel Shuler. Yes.

Mr. Flood. Why have you not requested facilities, like enlisted men's club and library and other recreational facilities, so that you would have your unit altogether? Now, you are building a new outfit; you are building enlisted men's quarters on a permanent base. Now, they are going to move in there. Now, when they move in, all you have got, when they get out of bed, they go to work and when they get back, they have nothing else to do.

Colonel Shuler. Mr. Flood, that is a very good question. We have certain limits of funds and authorizations each year that we can use to do our entire program. We are trying to provide the facilities you cite for all stations, for men who have already been living in barracks, without these facilities, for a long time. You are exactly right. We should provide for the men who go into this barrack, everything that they would need, but we have to do it in increments, year by year, just like we have to do it at every station in the Army.

Mr. Flood. Oh, I know, but I am mistaken on some occasions, but on other occasions, I am not. This is one case where I am not, when I am talking about Tobyhanna. You provide for me what you think will be a minimum of intelligent provision for the troops at this installation. You will have in round numbers 500 men, including officers, for what is a permanent base. You will not need these requirements for that many men right now; you will probably have about, maybe, 300, something like that. But if you are going to build barracks and bring the men into the Tobyhanna installation, at this great new base, you should have provided for them a minimum of the requirements that you provide for everybody else.

Colonel Shuler. It would not be fair to hundreds of posts in the Army, like Fort Huachuca, where we are not able to do that; we cannot do it for any particular one; we are trying to do this, considering all stations across the board.

Mr. Flood. What do you mean, you would not be able to do it for Huachuca?

Colonel Shuler. In order to get facilities for all the troops that all stations need, we would have need in this program for a great many more millions of dollars; and if we did that, we would never be able to get our program by the Bureau of the Budget and Secretary of Defense, with the guidelines that we have at the present time.

Mr. Flood. Again, I point out to you the great advantage of the rule of reason. That is a lawyer's term, and where we cannot think

of anything else to say, we appeal to the rule of reason. As a distinguished officer and in charge of this program, I recommend to you the application of that ancient British common law rule.

Colonel SHULER. Mr. Flood, if I had my way in this program, I would request a lot more money and a lot more authorization for the Army, because I think they need more.

Mr. FLOOD. Now, since that cannot be done, I again recommend the rule of reason. Certain things can be. We cannot go to extremes under any program. You are doing what you think is reasonable and intelligent in presenting this budget request here.

Now, I will point out to you that there are certain areas in here where the rule obviously has been extended. You have indicated that the distinguished Senator from one of the States is going to incorporate certain installations, and you have placed us upon guard.

Now, I place you on guard that that is the situation; in the words of Mr. Chief Justice Holmes, when he was on the Supreme Court of Massachusetts, "when that situation arises, we shall endeavor to deal with it."

Colonel SHULER. Mr. Flood, I only told this committee about Fort Huachuca, because I felt they should know of this request, and for no other reason.

Mr. FLOOD. I am sure not. My position is identical with yours. I am indicating a point of view that I have given to you for exactly the same reason.

Colonel SHULER. May I say something off the record?

Mr. FLOOD. Yes.

(Discussion off the record.)

Mr. FLOOD. I would like to have furnished for the record a list of additional facilities required to support the enlisted men's barracks at Tobyhanna Signal Depot.

(The following information was furnished:)

Tobyhanna Signal Depot, Pa., construction required to support enlisted men's barracks

Item	*Estimated cost*
1 baseball field, 1 softball field and 2 volley ball courts with necessary facilities	$10,000
Carbine and pistol range of 20 targets, with necessary utilities	16,000
600 square foot building for storage of small arms ammunition, with necessary utilities	16,000
Combined classroom building of 2,500 square feet and an education center of 1,000 square feet for a total of 3,500 square feet with necessary utilities	33,000
Combined building of 10,925 square feet containing a main exchange (6,300 square feet), a commissary store (3,500 square feet), an exchange retail warehouse (750 square feet), an exchange maintenance shop (375 square feet), and a gas station, with necessary utilities	153,000
Combined building of 14,200 square feet containing an NCO club of 4,400 square feet; a service club of 7,000 square feet; a library of 1,000 square feet and a crafts shop of 1,800 square feet, with necessary utilities	242,000
Guesthouse for 20 guests of 6,000 square feet, with necessary utilities	102,000
Gymnasium of 10,600 square feet containing 3 bowling alleys and a special service space of 400 square feet, with necessary utilities	123,000
Outdoor swimming pool, 63 feet by 82 feet and a bathhouse of 3,700 square feet, with necessary utilities	115,000
Total	810,000

Mr. SIKES. We will resume at 10 o'clock tomorrow.

TUESDAY, JUNE 28, 1955.

UNITED STATES MILITARY ACADEMY, N. Y.

Mr. SIKES. General Lawton, will you please present the next witness.

CONVERSION OF RIDING HALL TO ACADEMIC BUILDING

General LAWTON. I would like to introduce General Bryan, Superintendent of the United States Military Academy, who will present testimony to the committee relative to construction at the Military Academy the conversion of the riding hall.

Mr. SIKES. General Bryan, the committee is glad to have you with us and we will be glad to hear your statement.

GENERAL STATEMENT

General BRYAN. As Superintendent of the Academy, I have strong sentiments on two subjects concerning its future: The first subject is effective instruction. I consider it vital that the Academy return, as soon as practicable, to the educational concept that has distinguished it in the past. I refer to close instruction for small groups of cadets and daily recitation by each cadet. The project described as "conversion of the riding hall to an academic building" was conceived and designed to accomplish this purpose. The project was first postponed because of World War II, and again postponed because of the Korean conflict. I consider it no less worthy because of these deferments, only more badly needed.

The second project is "adequate housing for cadets". In my opinion it is fundamental that we should strive to relieve, as soon as possible, the overcrowded condition of cadet barracks. A recent survey of the study conditions indicated that the third, and at times the fourth, cadet in a room designed for two cadets was the greatest obstacle to study conditions. This same project, "conversion of the riding hall", is also the key to a partial realization of this second plan. Upon completion of the new academic building, we shall be able to convert our oldest academic building to a barracks housing some 300 cadets. Funds for this latter conversion will be requested as soon as the riding hall conversion is underway.

Based on the recommendations of the President's appointed Board of Visitors and on essential justification, your legislative colleagues authorized these two conversions in Public Law 534, 83d Congress.

The need having been recognized, I should like to inform you gentlemen on what has been done toward removing previously valid obstacles to the funding of the key project in our construction program; the conversion of the riding hall to an academic building.

First, we will be ready to build, starting this summer. The plans and contract documents for this structure are finished.

Second, I am convinced that our present plans represent the most economical, feasible solution to our problem of academic space. The cost of the structure has been compressed by successive reviews. Further pressure on funding will mean sacrifice of essential functions. This project has been under continuous review to insure that the cost is reduced to a minimum and we are satisfied that $8,450,000 is the lowest cost which can be expected.

Third, this conversion will give the Academy the required academic facilities that have been lacking since 1942 when the authorized strength was increased from 1,960 cadets to 2,520 cadets. Sufficient classrooms will be available to correct the present 25-percent overcrowding, and lecture halls that can accommodate an entire class, and map problem rooms essential to tactical instruction will be provided.

Fourth, we are assured of continuation of the present strength of the Corps of Cadets. There has been, in the recent past, some justifiable speculation on the effects of the New Air Force Academy on the number of cadets to be at West Point. The Chief of Staff has written me that notwithstanding the establishment of an Air Force Academy, there is a definite requirement in the Army for all graduates of the Military Academy.

I trust that you gentlemen will share with me my concern for the future of the Academy and look favorably upon the Department of the Army's request for permissive legislation to use funds on hand for conversion of the riding hall to an academic building.

I wish to thank you for this opportunity of appearing before you.

RESTUDY OF PROPOSAL

Mr. SIKES. General Bryan, you undoubtedly are familiar with the language carried in the report on the Supplemental Appropriation Bill, fiscal year 1955 (H. Rept. 2266, 82d Congress), the date of the report being July 16, 1954. That report states on page 43:

> Funds were requested in the amount of $8,450,000, for conversion of the riding hall as the United States Military Academy, N. Y., to classroom spaces. While the Committee recognizes the possible need for additional classroom spaces at the Academy, it desires that the Department restudy this proposal with consideration being given both to the erection of a less costly structure and to the amount of classroom space actually needed in view of the present and anticipated future enrollments at the Academy.

I assume that the latter deals specifically as to the effect of the Air Force Academy on future enrollments, but, of course, if there are other circumstances affecting enrollment, we would want to know about those also.

ERECTION OF NEW BUILDING

Now, will you discuss those two items carried in the report, first giving consideration to the erection of a less costly structure?

General BRYAN. In the first place, sir, as you know, West Point is built in a very hilly, rocky country where flat space, or space upon which you can construct such a building, is at a terrific premium. If you were to go out and blast out an area, if one could be found, to build such a structure, it would cost you much more than this building. There is no doubt about that.

Mr. SIKES. How much more?

General BRYAN. I am sorry, sir, I can't say. I am not an engineer.

Mr. SIKES. Is there anyone who can say? Is there anyone who can say how much more costly another building would be to provide the same facilities?

General STURGIS. Do you mean the same site as——

General BRYAN. Blast out a new place.

General STURGIS. I am sure that I would concur in what General Bryan says.

Mr. SIKES. In this report, dated a year ago, it specifically says, and I quote again:

> While the committee recognizes the possible need for additional classroom spaces at the Academy, it desires that the Department restudy this proposal with consideration being given to the erection of a less costly structure.

You are not prepared to give us any information on that at this time?

General BRYAN. I do know that it will cost more.

Mr. SIKES. We can't act on the basis of that statement. I don't question your integrity but this committee would like to have something specific to tie into this question, this request that was made a year ago.

General BRYAN. Do you have any estimate of the corps on that?

Colonel SHULER. Mr. Chairman, may I make a statement on that?

Mr. SIKES. Yes.

Colonel SHULER. This statement is based on the restudy of this project as required by the committee. The study was made jointly by the Superintendent of the Military Academy and by the Corps of Engineers. The study shows that a suitable site for a new building or a new academic building is not available at West Point. Now, as to the cost, if a new building at the site were built it should have a granite face in order to maintain architectural consistency with existing buildings. I personally think that is very important, to keep the architectural consistency intact at the Military Academy.

A new building, based on these studies, is estimated to cost $34 per square foot as compared with the estimated cost of $24 per square foot for the conversion of the riding hall.

Mr. SIKES. That would be a total cost of how much?

Mr. PANISH. Something over $10 million.

Mr. FOSTER. Mr. Chairman, to build a building of 300,000 square feet as opposed to one of 350,000 proposed here would cost $10,200,000, at $34 a square foot.

Mr. SIKES. As against $8,450,000 for the conversion?

Mr. FOSTER. That is correct, sir.

Mr. FLOOD. Would that building, the new building, if there was to be a new building, that would cost $10 million, would that cost include the suggested—and I agree—required granite facing? Would that be in the $10 million?

Colonel SHULER. Yes, sir.

Mr. SIKES. Would it also include a site?

Colonel SHULER. That is, if you did have a site there that is what the building would cost.

Mr. SIKES. Do you tell me there is no suitable site available within the Academy grounds?

Colonel SHULER. That is about right, sir, unless we put it on the parade ground or on an athletic field that is absolutely necessary. It is very crowded up there, sir, as to suitable ground on which to place a new building.

Mr. SIKES. Would it be necessary to acquire an additional site outside the present grounds?

Colonel SHULER. If such were available. From my memory, sir, going toward Highland Falls, there is nothing suitable that you could acquire on which you could place this building. Going up toward the football stadium you go up a steep hill, and going the other

direction, up toward the north, you have the Bear Mountain area and you really have no available flat ground.

Mr. SIKES. Has a survey been made to determine whether there is a suitable site existing either within or outside the grounds?

Mr. FOSTER. Mr. Chairman, if I may interrupt, we must bear in mind that the academic facilities at the Academy must be within a reasonable marching distance of cadet barracks and the other academic buildings. A maximum of 5 minutes is allowed for movement between classes.

Mr. FORD. Mr. Chairman——

Mr. SIKES. You haven't answered my question; has a survey been made?

Mr. FOSTER. Yes, sir; Mr. Chairman, the Academy grounds were surveyed and we have a map here that we can show the committee. It was surveyed and four potential locations marked. The only ones which could be used were examined in detail.

Mr. RILEY. Put it up on the mantle, please.

Mr. FOSTER. Mr. Panish from the New York Engineer District explained to me the other afternoon the details of the examination of these four sites and why each in turn was rejected in favor of the riding hall.

Mr. PANISH. Sir, we have to consider the living quarters as the focal point for any determination of site consideration. Since the cadets live in this area and they form in this area [indicating] prior to going to class, if we take as a focal point this front of the mess hall, and draw a circle having a radius of 1,500 feet, which represents about 5 minutes at double time, that would represent the maximum distance that they could reasonably go without a complete change in schedule and extension of their time.

Mr. FLOOD. Where is the riding hall as it now exists with reference to the center of your activity, on the perimeter of the 5-minute possibility?

Mr. PANISH. Yes, sir.

This area [pointing] is extremely rocky, very precipitous and highly impracticable from a cost point of view in terms of foundation costs and preparation. It therefore leaves us this area as the area we must seek for a possible site.

Mr. FLOOD. What is the nature of the substrata, the rock and subsurface?

Mr. PANISH. Solid granite and schist in this area.

Mr. FLOOD. If for some reason you decided to blast out a sufficient area to build a new building, you would be blasting in solid granite?

Mr. PANISH. Yes, sir. There is a further difficulty. The cadets must move on their own feet. If they have to climb 100 feet to the academic area, they will be pretty well winded by the time they make that ascent. So, in addition, we threw this area out because of elevation and high foundation costs, but the elevation seemed to us the important consideration. The number of areas available in this sector [pointing] are limited and their locations are fairly obvious. One site which must be considered, for example, is one which would require removal of some of these buildings, including the Superintendent's quarters. Another site is in the battle monument area. Another site is anywhere in the parade or Doubleday Field area. I treat those 2 as 1 site because the arguments against it are the same regardless

of where the building would be situated. The fourth site is the existing riding hall.

Now, we have a separate consideration, aside from the time of travel between the point of cadet formations and the academic structure and the other consideration is that the academic facilities shall be grouped together, the other academic facilities now existing and proposed to be retained.

Mr. FLOOD. Who are you and what is your job, Mr. Panish?

Mr. PANISH. I am a civilian assistant to Colonel Renshaw, district engineer at New York.

Mr. FLOOD. You are an engineer, too?

Mr. PANISH. Yes, sir; and I am here on General Sturgis' staff.

We plan to retain in the permanent establishment the east academic building. We cannot, therefore, pick a site for a new academic building at a long distance away because the cadets, in traveling between the classes would have a considerable delay.

We definitely find that we must pick a smaller area, this being now the second center over which we can draw a circle representing the existing and permanent east academic facilities. We can draw a smaller circle representing the limit of a closer appraisal.

That leaves us pretty much the Doubleday Field area which is open—a practice field—and the existing riding hall. The flat area at West Point is very limited. What is available is needed for parade, for athletic events, for outdoor training, for a variety of purposes and because of the scarcity of that area we were extremely reluctant to recommend that any of this area be taken.

Mr. SIKES. Could the athletic area be moved elsewhere or is the topography such that it couldn't be done?

Mr. PANISH. There is actually a separate athletic field itself, but the facilities here don't concern primarily the formal intermural athletics which are a separate activity.

Mr. SIKES. For what purpose is the riding hall being used at present.

General BRYAN. It is the most costly garage in the United States today, sir. It is used for storage of automobiles today.

Mr. SIKES. No other purpose?

General BRYAN. No, sir. It has some hobby shops and crafts shops and things like that in it which are inconsequential, but it is just there.

Mr. FLOOD. May I ask you this: suppose you take that hat off and we will hire you. What is the matter with it? What arguments would you advance against this hall? What is the matter with the deal? What are the bad points for this purpose?

Mr. PANISH. Well, sir, I have to speak basically in terms of construction because I am an engineer. The essential bad point about it and one of the reasons why the cost is higher than it might otherwise have been if we had an ideal structure is that the existing structure has relatively few windows, virtually no outside ventilation. The width across the building is wider than normally you would try to build a building if you were building with a free hand. In consequence you have a requirement for ventilating this building. Twenty years ago that might have been highly objectionable. We don't think of it now as so highly objectionable. However, mechanical facilities are always a headache in any building. If we had a free choice, we would take a building without mechanical ventilation.

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If we are to utilize this shell (and the key to the cost of this, using this, lies in the shell) we must go to mechanical ventilation. The reason why I say the key to the cost lies in this shell is because we feel that we would like to retain, as was mentioned, the granite surface which is characteristic of West Point architecture. I think it might be desirable to show you a picture of the building if you would be interested in the views.

Mr. RILEY. If you have to have mechanical ventilation, would you also have to have an excessive light system?

Mr. PANISH. No, sir. The lighting is virtually the same.

Here is a picture of the riding hall closer up [indicating].

If you will permit me, I will get one on a card that you can view a little more easily.

Mr. FLOOD. In response to the question asked by the chairman, Mr. Sikes, this presentation that is being made today is being made, faced with and in the face of the report that Mr. Sikes read and you people knew about the report a year ago and as a result of that report you conducted a series of surveys and after those surveys you have prepared this presentation that you are making here today because of the existence of that report? Is that It?

Mr. PANISH. Yes, sir; except that the question is embarrassing to this extent: we would be most remiss if our original recommendation to you for a facility hadn't been, in our opinion, the least expensive and the best, all things considered.

Mr. FLOOD. Our ways are wondrous to behold and in spite of your integrity, the committee did make that report. Faced with that report, you still come back and still proceed as you are proceeding now and this is a supplemental and an additional or maybe the same report but whatever you are saying today, you say with full knowledge of the requirements of that report. Is that it?

Mr. PANISH. In other words, we are not able to offer——

Mr. RILEY. How many stories will you have?

Mr. PANISH. We will have four stories inside the structure.

Mr. RILEY. How many classrooms?

Mr. PANISH. There will be 191 classrooms.

Mr. RILEY. Will that include the larger lecture rooms also?

Mr. PANISH. No, sir. There will also be included a 1,500-seat lecture room and an 800-seat lecture room, 2 writ rooms of 200 capacity each and 2 map-problem rooms.

Mr. RILEY. In addition to the classrooms?

Mr. PANISH. Yes, sir.

Mr. FLOOD. I would like my friend, Mr. Ford, to just play on the sentence that he just whispered in my ear, that about sums, that is about the best analysis of this picture that I have heard.

Mr. FORD. Mr. Chairman, I would like to say that as a member of the Board of Visitors a month or so ago I went to West Point and spent several days there looking over this entire situation. It would be my opinion that all factors considered, that the proposal would be a sound one primarily because of the existence of this building which is now being uneconomically and inefficiently used. If you don't use it for something like this, this proposal I mean, I can visualize no effective utilization of the building for the foreseeable future. It does tie into the overall plan and program locationwise. I doubt if it would be feasible to work out any other satisfactory solution. To the layman—

and I consider myself that in this kind of a situation—to look at this building that we see in this picture and see it used just for the purpose shown is just inefficient and uneconomical. I pass no judgment on the engineering cost figures because I am not qualified, but from a layman's point of view, it sounds like a good solution.

Mr. SIKES. That, I assume, is your position; also yours, General Bryan?

General BRYAN. Yes, sir.

Mr. SIKES. General Sturgis, the committee would like to have your opinion on the feasibility of this report.

STATEMENT OF GENERAL STURGIS

General STURGIS. May I first read my statement, Mr. Chairman?

Mr. SIKES. Of course.

General STURGIS. Gentlemen, General Bryan has outlined to you the justification for additional academic space at the Military Academy. My remarks will deal with the engineering and economic aspects, some of which have been covered by Mr. Panish.

The site selected conforms with the master plan. Functionally, a new academic facility must, firstly, be within short walking distance of the cadet barracks, and secondly, be in close proximity to the existing East Academic Building to conform to the stringent class schedule of the cadets. Of several possible sites, I do consider the Riding Hall to be the best.

A new building would require one-half a million dollars to clear the present site, and would cost a total of about $10 million to provide a structure architecturally similar to buildings in the vicinity, which I think is absolutely essential. This is $1.5 million more than the currently authorized plan for conversion of the existing Riding Hall. I, therefore, recommend conversion.

The current plan provides for a structure of 352,000 square feet, with 191 section-type rooms and supporting facilities. We will use the existing Riding Hall shell, and build therein a four-story steel frame structure with concrete floor slabs, and a concrete roof permitting car parking thereon, on this roof.

Because of the lack of windows, a combined heating and ventilating tempered air system will be provided. Fluorescent lighting will generally be used.

The authorization in amount of $8,450,000 is based upon an estimate prepared in April 1953. Since then, the construction cost index has risen about 12½ percent, and an additional rise is expected shortly. As a result, our current working estimate has risen to $8,950,000; and we have, therefore, found it necessary to provide deductive items in our bidding schedule to assure award within the $8,450,000 authorized and only which we are requesting. These deductive items are highly desirable, and should be furnished to provide a complete project; however, their omission will not seriously impair the functional use of the building if we are unable to get them included as we should.

The Riding Hall conversion is the only satisfactory and most economical facility which can be provided to meet the requirements of the Military Academy. It will require 2 years to construct, and is part of a packaged plan designed to relieve a shortage of academic space and an overcrowded barracks condition brought about in 1942

by the increase in the strength of the Corps of Cadets from 1,960 to 2,520 cadets. This project should be funded now, and the conversion of the West Academic Building to barracks funded next year.

Even with this favorable action it will require 2 years to relieve the shortage of academic space, and 4 years to partially relieve the overcrowded barracks condition. A total of more than 6 years of phased construction will be required to bring our fixed plant at the Academy up to the currently authorized strength. I sincerely hope there will be no delay in this project. Plans and specifications are complete and we are ready to advertise for bids.

DEDUCTIVE ITEMS

Mr. SIKES. General Sturgis, what are the deductive items you have referred to?

General STURGIS. The deductive items, sir?

Mr. SIKES. Yes.

General STURGIS. It would include all auditorium seats arranged for tablet arms; tables and seats in both Map Problem rooms; vertical sliding chalkboard units on corridor wall of all section rooms in lieu of fixed units in the base bid——

Mr. SIKES. It appears to me that most of those items would be required for the satisfactory operation of the building. Would they not have to be provided later if they were deducted now?

General STURGIS. Well, from a requirement point of view, those are items that are considered essential, sir, as given to us. Of course I am not in a position or qualified to say whether they should be omitted or not.

General BRYAN. Certainly the seats in the auditorium would make the auditorium.

Mr. SIKES. Practically all of these items would have to be provided sooner or later.

General BRYAN. That is right, sir.

ANTICIPATED FUTURE ENROLLMENTS

Mr. SIKES. General Bryan, would you comment on the present and the anticipated future enrollments at the Academy? Do you anticipate any change in enrollment, particularly due to the construction of an Air Force Academy?

General BRYAN. I have the assurance as Chief of Staff, sir, that all the cadets who graduate from the Military Academy will be required in the Regular Army.

Mr. SIKES. You do not anticipate any changes in enrollment?

General BRYAN. No, sir, no decrease in size.

Mr. MILLER. What about an increase, General? Is there any prospect of an increase in enrollment?

General BRYAN. There was some talk of an increase that I do not know anything about, sir, because there was a minor increase but inconsequential. We could take about 2,520, that is the present authorized strength, as a good workable figure.

Mr. SIKES. It is my understanding that you have the funds, in the amount of $8,450,000, on hand for the conversion.

General BRYAN. The Department of the Army has the money.

Mr. SIKES. If the other items which General Sturgis has told us would have to be deducted to stay within that $8,450,000 figure, if those other items were included, would it be necessary for the committee to provide additional $500,000 or does the Army also have that money which could be used, if authorized?

Colonel SHULER. We have that money, sir, included in the $20 million savings that I have already cited in the record against which we are asking permission to use $15 million total and that includes the riding hall. We could furnish the additional amount of money, sir, out of savings, if this committee approves.

OVERCROWDING IN BARRACKS BUILDING

Mr. SIKES. How long has the condition of overcrowding in the barracks building been in existence?

General BRYAN. Since the last increase, sir, in 1942. We have never caught up with the administration—in other words, they increase the size of the Corps of Cadets but they don't increase the physical establishment, sir.

Mr. SIKES. You anticipate, that as a follow up, in order to make your facilities what they should be, that you will want to convert your oldest academic building to a barracks building?

General BRYAN. That is correct, sir.

Mr. SIKES. Do you know what that will cost?

General BRYAN. A rough estimate on that is about $1.5 million, sir. That will not completely eliminate all of the overcrowding, sir.

Mr. SIKES. Is there an authorization for that?

General BRYAN. Yes, sir.

Mr. FOSTER. May I speak to that point, sir?

Mr. SIKES. In what bill was it authorized, what year?

General BRYAN. At the same time as the riding hall, sir.

Mr. FOSTER. That is correct, Mr. Chairman. I was working on this same work at that time and the legislative committees were told that the conversion of the riding hall and the subsequent conversion of the west academic building were consecutive, related projects. On that basis, the authorization was granted simultaneously.

General BRYAN. It is impossible, however, to undertake the change in conversion of barracks until we complete this other move here, sir.

PARKING ON ROOF

Mr. RILEY. General Sturgis, what is the advantage of parking cars on the roof and how would you get them up there?

General STURGIS. They get there by a bridge from the level of the plain, sir, over to the roof of the academic building. The advantage is——

Mr. RILEY. That answers my question. I was wondering whether or not you had to have an elevator to get them up there.

General BRYAN. There is only a 4-foot difference in elevation from the existing road to the top of the building.

General STURGIS. There is no elevator involved, just entry through a bridge from the road on the plain right over to the roof of the building.

Mr. RILEY. That is a practical proposition. Now, what about your parking cars in there in the winter to be exposed to the weather?

General STURGIS. That would be just as they are now. When anyone drives up to the main post and parks, his car is still exposed. There wouldn't be permanent parking there. It would be more for people——

Mr. RILEY. The present riding hall is not used for maintenance or upkeep?

General BRYAN. Just a place to keep cars.

General STURGIS. It provides a very handsome space there, very large space, which is so badly needed considering the congestion that is around there now.

Mr. RILEY. If you can reach it from the level by means of a short bridge, I think that is a practical solution.

General BRYAN. There is a difference of four feet in elevation, sir.

COMPLETION OF CONSTRUCTION CONTEMPLATED

Mr. FLOOD. Why is it going to take 6 years to complete the whole operation? I know the second move can't begin until the first one is finished but why is it going to take you 4 years to finish the barracks end of this deal?

General STURGIS. For the first thing, until they get the new academic building, they can't touch the west academic building.

Mr. FLOOD. I just said that, but why is this so important? Why can you not speed up the second leg?

Mr. PANISH. Sir, there are a number of projects shown on this chart. This was prepared by Colonel McCutcheon, the engineer at West Point. The vertical element here represents dollars and the horizontal represents time. On "time" are indicated the successive fiscal years, starting with 1955 and increasing as we go to the right. The symbols are solid black, appropriation; diagonals are authorization. Those represent legislative operations. Construction is this symbol and advertising is this symbol. From our field point of view these last two symbols are control elements. You will notice the first thing we propose to start in on with advertising early this fall, to construct for a period of 2 years, is the academic building. Until this construction is complete, we cannot begin the conversion of the west academic building because we cannot release this academic space.

Mr. FLOOD. On the first phase of it are you satisfied that the 2 years that you require is normal and natural and a perfectly proper period of time to do this reconversion job of the riding hall? Are you satisfied with that?

Mr. PANISH. Yes, sir.

Mr. FLOOD. You can't speed it up intelligently, as I take it?

Mr. PANISH. The time, you see, is set by the restricted phase available. I doubt if we could speed it up if we wanted to.

Mr. FLOOD. You finished the first leg and now you are going to the conversion of the academic building to barracks. That is going to take you 4 years. Why?

Mr. PANISH. We have a year and a half for conversion of that building. We cannot begin until we have occupancy of this.

Mr. FLOOD. By "this and this" you mean what?

Mr. PANISH. We cannot begin conversion of west academic building to barracks until the academic building space is available in the new riding hall.

Mr. FLOOD. Now it is available, why should it take you 4 years to do the next job?

Mr. PANISH. It only takes a year and a half.

Mr. FLOOD. I see in the engineer statement a total of more than 6 years of phase construction will be required to bring our fixed plant at the Academy to current authorized strength.

Mr. PANISH. The statement stated it will be 4 years to "partially" relieve crowded conditions. The 4 years is the construction time of the academic building, plus the conversion of the west academic building to a barracks. That is 1956, 1957, 1958, 1959, roughly. Beyond that, there is a limit, the general has indicated, for additional cadet barracks space.

Mr. FLOOD. That is a third matter.

General BRYAN. That is not included in this.

Mr. MILLER. That is in the 6 years?

Mr. PANISH. That is right.

General STURGIS. If you will note, sir, my statement on 6 years to complete the building requirements to handle the entire new strength of 2,520——

Mr. FLOOD. In other words, reconstruction of the riding hall plus reconversion of the academic building to barracks will actually take 4 years, the first 2 things we are talking about; the 6-year business covers other items we have not discussed.

General STURGIS. If you will remember, General Bryan indicated that the conversion of the west academic building would partially——

Mr. FLOOD. It just struck me that this is so very hot that you are casual about it, you are talking about something else as well. As a matter of fact, you are confronted up there with a fantastic and almost insurmountable problem on this confounded granite upon which you live; is that not so?

Mr. PANISH. That is one factor.

Mr. FLOOD. That even in this committee we cannot do anything about that, I suppose, can we?

You told Mr. Sikes that you have been assured by the Chief of Staff and you have every reason to believe that the Army will, as far as we know, in the future require this cadet strength.

General BRYAN. That's right, sir.

Mr. FLOOD. Do you expect it to maintain this level? There is nothing to indicate it will be increased as Mr. Miller asked you? Is that true? So we are looking at a cadet strength of 2,520. That will include facilities you require or they will need the facilities you require in the conversion of the riding hall and for barracks facility. There is no doubt about that?

General BRYAN. No doubt about that as far as human mind can know. What will happen in the distant future I have no idea, sir.

Mr. FLOOD. I am satisfied about that. You are not Houdini, I know.

General BRYAN. I can't gaze in a crystal ball and come up with what is going to happen 10 years from now. That is going to be somebody else's problem anyhow.

Mr. FLOOD. We would keep you right here if we thought you could do that.

Now, you do not consider these requests or these requirements inordinate? You do not consider them excessive. You do not consider them fancy or extravagant in any way?

General BRYAN. I do not, sir.

Mr. FLOOD. You think these are rockbottom, minimum figures or requirements to serve this regiment, is that it?

General BRYAN. I do. I would like to further point out here that since this statement was made, time marches on, costs have gone up and that is the reason for the additives in here.

Mr. FLOOD. Let me add this at this point. As far as I am concerned, if you, Colonel, have the money and are merely hoping somebody permits you to spend it, out of that $20 million or the $15 million you are requesting, and if the Navy is going to have two wings placed on Bancroft Hall—and I am for that—and if the Air Force is going to go into this development of Colorado Springs or Colorado, wherever they are, and I think the less we say about that right now for everybody's blood pressure the better off we will be—then certainly I don't want to see the Army coming in here time after time, and here is another example of it. Now, you are going to carry around this rule book with you to the extent that you are giving us a list of deductive items and I will bet if you were a general in the Air Force handling this thing you would not be so concerned about the deductive items. That is very commendable and you are to be commended for considering us that much. But at the same time, as far as I am concerned, when you go out of here, you put those deductive items back in and you give West Point and the Corps of Cadets the best possible converted riding hall for academic facilities you can give them and you give them the best possible barracks in those academic halls when you convert to barracks that you can give them. And in my book, stop worrying about this money for proper facilities to train the Corps of Cadets. We are not going to chisel on that operation, not as far as I am concerned.

Mr. RILEY. Will the gentleman yield?

General, if you had to go back later and put in these items that you propose to deduct on account of costs in excess of your request, would it or would it not cost more to add them after you completed the building?

General STURGIS. I think it would cost somewhat more, sir, to have them added.

Mr. RILEY. And at the same time inconvenience the corps.

General STURGIS. We are following a practice, Mr. Riley, which is this: As you know, we are getting awfully good bids these days but the price index has gone up, which means that contractors are cutting down on their contingency items and profit. I think many of them, from my contact with the industry, have never seen the competition so keen. We see no reason why that should not continue for the next few years. Of course, pretty soon some of them are going to start going broke; but since that is true, even though the price levels are rising, and since we must be realistic in our requests for all appropriations to Congress as far as the corps is concerned, since we are trying to stay within what we can really foresee, we are taking advantage of that here. Of course, it would be much better, as Mr. Flood says, if we can get these items initially because they are an efficient requisite, as you can see, and we would prefer to get them now.

Mr. RILEY. Is there any possibility that you could get these items with the better contractual costs that you have been experiencing within the limits that you now have?

General STURGIS. We think there is a chance. We naturally would prefer to have the higher figure of $8.9 million but we think there is a chance to get the job done cheaper and therefore we think it our duty to make that statement before Congress when we can see a possibility of getting a lower price on these items.

Mr. SIKES. Those come in the second year of construction after you have definitely determined what the basic cost is going to be—is that not so?

General STURGIS. I would have to take a look at some of them. Do you think we can get them, Mr. Panish?

Mr. PANISH. That would require either a continuing contract or second contracts on top of primary contracts.

DEFERRAL OF ITEMS

Mr. SIKES. Will you prepare for the committee a complete statement on that to show what, if any, of these items could be deferred to the second year and which ones should be included in the initial contract.

(Information requested is as follows:)

At the risk of a 15-percent increase over the current estimates, the following items can be deferred until next year:

Description	*Present estimate*
Tablet arms for auditorium seats	$33, 900
Tablets and seats in map problem rooms	29, 500
Freight elevator	39, 600
Passenger elevators	93, 000
Total	196, 000
Estimated cost if deferred to next year	225, 400

Mr. MILLER. I cannot enthuse about an auditorium without any chairs in it; I frankly can't.

General STURGIS. It wasn't the chairs; it was the tablet arms on the chairs.

Mr. RILEY. Mr. Chairman, I am rather strongly of the opinion that you get a better contract if the whole letting could be advertised and let at the same time. I am sure the engineers would not spend this money unless it is necessary. If they get better bids than they anticipate that money could be returned for other purposes.

Mr. FOSTER. May I make an observation, Mr. Chairman? We have sufficient legislative authority to cover these deductive items, if it is the sense of this committee and the Congress that these should be provided; and if we get a good bid, we can go ahead and let them without further recourse to the legislative committees.

Mr. SIKES. Any further questions, Mr. Flood?

Mr. FLOOD. No. I just wanted to be very clear that as far as we are concerned here, this is a vital essential to the establishment of a permanent, good-sized professional army and all of these suggestions in that legislative committee report—maybe there won't be any Army or maybe you won't need all these buildings or maybe you won't need West Point—while I may be exaggerating the extremity of the suggestion, yet that idea is bouncing around here and I will have no part of it. If the Air Corps is going to build $125 million chateau out in Colorado, starting this year, and when we know the potential of guided missiles, within 5 or 10 years there probably won't be

anybody flying airplanes in 10 years—I don't know—what are we going to use the Air Academy for unless it is to store excess wheat, maybe? But this committee I do not think is going to be concerned about some blackboards and chalk and shelves at West Point in view of these other discussions in the other branches of the armed services. And if you are not going to take care of West Point in the Army, we are.

Now, somebody is going to start looking after this Army.

Mr. MILLER. I do not know that I share my colleague, Mr. Flood's, worry about the blackboards and the chalk quite to such a degree as he does. I trust that nothing is going to interfere with the carbon paper and the typewriters, though, because if we should have a shortage of those in the Army heaven knows what would happen.

General BRYAN. I am trying to produce a shortage of paper right now.

Mr. FLOOD. We will store some of those quadruplicates in vacant Air Force buildings.

CADET AND OFFICER STRENGTH

Mr. MILLER. There is one thing I would like to ask you and that is this: the overall picture worries me a little bit in the general appearance of overcrowding that you seem to be getting there in the Academy area. When we consider the fact that the best information we can get indicates that we have leveled off—in fact, this committee has heard a good many squeals about our making the Army too small as it is, and when we hear that there is not likely to be a change in the foreseeable future in the needs and we have a setup where only 24 percent of our commissioned force is Regular Army, it seems to me an unhealthily small proportion, that we might be on a better, sounder basis to think about expanding the size of the student body at the Point rather than cutting it down. Should that develop, we might be in a rather tight box there, might we not?

General BRYAN. Yes, sir; there are many points to be covered in what you said, sir. In the first place, it has never been the intent to furnish all Regular Army officers from West Point.

Mr. MILLER. I don't think that is at all necessary.

General BRYAN. It would be highly undesirable, I would say, sir.

Mr. MILLER. At the same time, we have a pretty low percentage right now.

General BRYAN. In the Regular Army, there are approximately 28 percent Academy graduates. I am speaking now of Regular Army officers. There are 28 percent. When you take the percentage of the West Pointers and compare them to all the commissioned officers, then it drops to 6.3 percent of all commissioned officer personnel. If we could turn out approximately 600 graduates a year, and we can do that, we can come awfully close to it now, we will have approximately in the lower grades a little better than 33 to maybe 40 percent of Regular West Pointers in the lower grades. By the time you bring that up and arrange it in the overall, it will run approximately 25 to 30 percent.

Mr. MILLER. What percentage of West Pointers would you think would be a reasonable and proper one, for instance, if you brought the Army to a basis where 40 percent of the commissioned personnel were Regular Army rather than the present 24 percent?

General BRYAN. You should have enough people in there with the training of West Point behind them so that they can exert a sizable influence. I would say approximately one-third, sir, would be plenty. I don't think you want to get this thing all told. There are certain inherent dangers which you see.

Mr. MILLER. I agree with you, General. I don't think you want to upset the balance. I frankly—and my entire military experience has been as a Reserve officer—but I am a little bit alarmed at leveling off on a long time haul when there is such a large percentage of our officer corps not what you would call professional. It is unfair for them in some respects as well as it is to the service.

General BRYAN. I would also like to point out that if you go in and increase the size of the cadet corps to say 4,000, you would lose a terrific advantage because each man in there would not know his classmates, which is, of course, a terrific advantage to you when you are in war or any other place.

So, you have to balance that against the capability of the individual cadet to know all the other people.

EFFECT OF AIR FORCE ACADEMY ON REQUIREMENTS

Mr. MILLER. There is this factor, too, is there not, that in view of the Air Force Academy being established, when it gets underway, it will ease the requirement, don't you have to supply about 25 percent of your——

General BRYAN. I supplied 30 percent last year. I was told to supply 20 percent and we produced 30 percent qualified people, qualified to take pilot training.

Mr. MILLER. Qualified to take training. Now, as a result of this change, once the Air Force Academy grows to authorized strength, that will amount, in a way, to increasing the proportion of the officers available.

General BRYAN. If it continues as it does last year, I will secure an additional 130 men per year. That is the number I turned over last year, approximately.

Mr. MILLER. So far as Army Ground Force, or you might say, Regular Army requirements, that would be the highest and largest peacetime output we have ever had, wouldn't it, because it will all be going to Army, then, instead of divided up as it is now.

SEWAGE DISPOSAL

One other thing, General, while we have the chart out there, or maybe it is in your department, what is the situation about the sewage disposal at the Point?

General BRYAN. It is well underway and will be completed about the middle of November.

Mr. MILLER. The raw sewage, does that apply to the whole military area there?

General BRYAN. All of West Point, sir.

Mr. MILLER. I have always felt that was one of the very unfortunate things.

General BRYAN. It isn't very pleasant.

Mr. MILLER. When we think of the troubles that some of us have about sewage—that is all, Mr. Chairman.

Mr. RILEY. There are one or two other items here I think we ought to get in the record while General Bryan is here.

"NCO open mess and extension"——

Colonel SHULER. Mr. Riley, those are items that I will defend as we go through this book. Do you desire to have that done now? It is just normal——

Mr. RILEY. I think it would be better to have it all in one package.

Mr. SIKES. I would like to express the appreciation of the committee for the testimony you have given us. This is an important matter and one I think the committee is fully in sympathy with. We are glad to have you with us, General Bryan and General Sturgis and the members of your respective staffs.

General BRYAN. Gentlemen, as Superintendent of the Military Academy, I would like to say that the place belongs to you more than it belongs to me and we will be very happy to have you up there at any time that you can come. As they say, I will do my best.

Mr. SIKES. Thank you very much. Will you continue Colonel Shuler, please.

Colonel SHULER. Mr. Chairman, to summarize the requirements at the United States Military Academy at West Point, N. Y., we request approval of reprograming of $8,450,000 from prior years saving to fund the conversion of the existing riding hall to an academic building and new appropriations for three other projects: Replace switch gear in powerhouse, $273,000; NCO open mess, $211,000; and an extension of sewer, $272,000. The conversion of the riding hall is authorized by Public Law 534, 83d Congress.

CONVERSION OF RIDING HALL

I will first discuss the conversion of the riding hall.

In 1942 the authorized cadet strength of the United States Military Academy was increased by Congress from 1,960 to 2,520. Due to a more urgent construction requirement for World War II and the Korean conflict, needed additional academic and barracks facilities have not been provided at USMA.

To provide minimum essential academic facilities and to partially relieve overcrowded barracks based on currently authorized strength (2,520), the Superintendent, USMA, has recommended:

(*a*) Conversion of existing riding hall, now used as parking area and for extracurricular activities, to an academic building. Proposed project consists of erecting a 4-story steel and reinforced concrete structure within existing building to provide 350,000 square feet of space.

(*b*) After beneficial occupancy of converted riding hall, to convert outmoded west academic building (constructed 1895) to a cadet barracks.

Department of the Army requested Congress in fiscal year 1955 to authorize construction and appropriate funds for conversion of riding hall ($8,450,000) and to authorize conversion of west academic building ($1,500,000). Both facilities were authorized (Public Law 534, 83d Cong.). The Senate Appropriations Committee recommended approval of funds for conversion of riding hall; however, House Appropriations Committee denied funds based on need for reconsideration by Army of (*a*) classroom space needed for future

enrollment and (*b*) possibility of erection of less costly structure. Department of the Army has again requested funds ($8,450,000) in fiscal year 1956 military public works legislation for the riding hall. If request is approved Department of the Army plans to request $1,500,000 for conversion of west academic building in fiscal year 1958 military construction, Army program.

Current capacities and requirements

	Current capacity	Requirements
Academic facilities	1,960 cadets	2,520 cadets.
Barracks	1,696 cadets	2,520 cadets.

The existing deficiency in academic facilities is currently being met by overcrowding classrooms and instructors' offices, and adapting temporary classrooms for tactical instruction. There is no foreseeable decrease in authorized strength (2,520) of the Cadet Corps or resulting academic facility requirements. The current deficiency in barracks space is now being met by assigning 3 cadets to rooms designed for 2.

A suitable site for a new academic building or a barracks is not available at West Point. Any new building, if a site were available, should have a granite-face to maintain architectural consistency with existing buildings. A new building is estimated to cost $34 per square foot as compared with estimated cost of $24 per square foot for conversion of the riding hall.

The report of February 11, 1955, to the President from the Board of Visitors to the USMA commented that "The conversion (riding hall) is the greatest need of the Military Academy today. Its completion would provide the classroom space necessary for maintenance of the time-proven methods of instruction at the Military Academy."

The report recommended "that every possible effort be made promptly to secure the funds for conversion of the riding hall to academic space so that work may be undertaken without delay."

The report was signed by Congressman F. Edward Hébert, Olin E. Teague, and Leroy Johnson and four Presidential appointees.

REPLACE SWITCH GEAR IN POWERHOUSE

The second project is to replace switch gear in powerhouse, $273,000. This project provides for the following:

General construction, including protection of existing equipment, alterations and new platform	$36,000
Electrical work (new switch gear and cubicles, $164,000; reconstruct existing switch gear, $20,000; instrumentation, $8,000; wiring and miscellaneous work, $45,000)	237,000
Total	273,000

Capacity of existing circuit breakers has been derated 50 percent by the National Electrical Manufacturers' Association as a result of tests performed during the past 10 years. Existing breakers were installed in 1932 and their dependability under short-circuit conditions is unreliable. Short circuits not only may damage equipment in the powerhouse, valued at $945,000, but also interrupt electrical service to the entire Academy. New circuit breakers will be installed

on a platform along the south wall of the operating room of the powerhouse, thus providing accessibility for safe operation and maintenance. Locating the replacement breakers in the existing congested room would cost approximately $545,000.

NCO OPEN MESS

The third project for the Military Academy will provide an NCO open mess, $211,000. The facility will be a 10,249 square foot masonry and brick building with concrete plank and composition roof, containing the following:

	Square feet
Kitchen, dining room and storeroom	2, 097
Library, game and recreation rooms, office	3, 309
Snack bar, dressing rooms, cold and dry storage	1, 296
Ballroom and lobby	2, 396
Hallways, stair wells, etc	1, 151

Present NCO open mess is housed in a 4,445-square-foot frame building constructed in 1919 as a children's recreation hall. The floor area is inadequate for the membership of 463. Overcrowded condition is particularly acute during the summer months when the NCO strength is increased by approximately 290 from troop units temporarily stationed here to assist in cadet training. Present NCO open mess facilities are a source of discontent and lowered morale for NCO's and their families. The surrounding communities do not provide similar facilities which are accessible and at prices which NCO's can afford. Existing building will be retained for youth activities.

EXTENSION OF STORM SEWER

The fourth and last project is the extension of storm sewer by 2,190 feet at an estimated cost of $272,000.

This project is required to provide drainage in the central area of the USMA. New buildings and paved areas, constructed since the existing 12 cubic feet per second sewer was built in 1908, have overloaded the sewer and, in addition, it is incapable of handling the 25 cubic feet per second storms which occur approximately 6 times per year or the 61 cubic feet per second storm flows which occur approximately once in 10 years. Proposed project is essential to correct a health hazard resulting from the flooding of the cadet barracks' basement (location of toilet and locker facilities) and the cadet mess basement (location of the bakery, meat-cutting rooms, refrigeration, food storage and ice cream facilities) which occurs approximately 6 times a year, the most recent being October 2, 1954. Approximately $1 million of property (electric and mechanical equipment, clothing lockers, and stored supplies and furniture) is located in the basements of the cadet mess, gymnasium, barracks and east academic building. Operational difficulties result from the flooding of the mechanical laboratory in east academic building (average of 12 times a year) and the gymnasium main shower room (6 inches of mud and sanitary sewage on October 2, 1954).

Mr. SIKES. The committee is in receipt of a telegram from the Chairman of the Board of Visitors of the Military Academy dated February 12, 1955, relating to the conversion of the riding hall which will be inserted in the record at this point.

(The matter referred to follows:)

WEST POINT, N. Y., *February 12, 1955.*

CHAIRMAN,
Appropriations Committee,
House of Representatives:

Board of visitors, United States Military Academy, in annual inspection finds greatest need of Academy is for additional up-to-date academic space. Conversion of existing building to academic purposes authorized by Public Law 534, 83d Congress, 2d session. Board learns Army proposes fund project approximately $8,500,000 from uncommitted moneys available provided Congress approves. This board strongly recommends such approval at earliest date so that much needed conversion can be undertaken.

JAMES P. BAXTER,
Chairman, Board of Visitors.

TUESDAY, JUNE 28, 1955.

CORPS OF ENGINEERS FACILITIES

Mr. SIKES. The committee will come to order. Colonel, you may proceed.

ARMY MAP SERVICE, MARYLAND

Colonel SHULER. We will turn to page 124 in the large book, sir. The first station this morning is in the Corps of Engineers, the Army Map Service in Montgomery County, Md. We are asking for $62,000 to fund a vehicle-maintenance shop at this station. This project is for a vehicle-maintenance shop and it does not represent a new facility but rather replaces an existing inadequate structure. There will be no increase in local vehicle maintenance as a result of this construction. The major repairs are now being done commercially except where we can do them on a backlog basis. This is for the first and second echelon repair, sir, and does not in any way compete with commercial concerns.

FORT BELVOIR, VA.

The next station is Fort Belvoir, Va. We are asking for a total of $4,608,000. We are asking for a list of items which I will read: $1,445,000 for 114 sets of noncommissioned officers' quarters. We have already funded last year's residual authorization of $3,866,000. The list of items includes WAC barracks ($289,000); enlisted men's barracks for the medical detachment ($256,000); bachelor officers' quarters for nurses ($276,000); a project to complete the basement of the materials laboratory ($104,000); a heavy equipment modification shop in the engineering proving grounds area ($414,000); a precision machine shop ($52,000); an enlisted men's barracks with mess ($987,000); two battalion headquarters buildings ($88,000); a commissary ($312,000); a test loop in the engineer proving ground area ($170,000); and then two items at Davison Field. One is a control tower ($102,000) and the other is water and sewage disposal systems ($113,000) and as I said before, the total amount of money is $4,608,000.

WAC BARRACKS

Starting on the first item, the WAC barracks with mess, this item is required for the peacetime complement of WAC personnel who are

now housed in converted family housing units. They were 63-man mobilization-type barracks. The present housing that I have described does not provide the privacy required as the area is adjacent to enlisted men's barracks, the post exchange, and service club.

ENLISTED MEN'S BARRACKS

The next item, sir, is enlisted men's barracks without mess. We have a new permanent hospital, 250-bed on 500-bed chassis, which is presently under construction at Fort Belvoir and will be completed by September of 1956. This enlisted men's barracks for the medical detachment is to support the new permanent hospital. The mobilization-type barracks now housing the medical detachment for the old hospital is about 2 miles away from the new hospital and we have no existing barracks near enough for these men who must respond quite rapidly in cases of emergency.

Mr. SIKES. What use will be made of the present barracks that are at present housing medical detachment personnel?

Colonel SHULER. The present barracks will be utilized, sir, in connection with the present hospital which is a mobilization type. We will not put them in standby until the need for them expires.

Mr. SIKES. I thought you were going to phase out the old hospital. You have a new hospital.

Colonel SHULER. These barracks will be utilized until we get this requested barracks completed and the new hospital completed and then, as you say, the old hospital will be phased out and these barracks will be torn down or kept on standby for mobilization purposes.

Mr. SIKES. How far are the present barracks from the new hospital?

Colonel SHULER. They are, sir, about 2 miles from the new hospital, which is on the main post side of the highway.

Mr. SIKES. These barracks are for personnel who must be near the hospital?

Colonel SHULER. That is correct, sir.

Mr. SIKES. Are the present barracks of the World War II temporary type?

Colonel SHULER. They are, sir, and they have deteriorated quite a bit since 1942.

Mr. SIKES. Are they of wood construction?

Colonel SHULER. Wood construction, sir, but they would be utilized until we phase out the other hospital which will be probably in 1957, early part of 1957 when we get the other one built and running, sir.

BACHELOR OFFICERS' QUARTERS (NURSES)

The next item on the list is bachelor officers' quarters for nurses.

Mr. FLOOD. Off the record.

(Discussion off the record.)

Colonel SHULER. That is the official term, Mr. Flood, that we use for this building.

Mr. FLOOD. I realize that.

Colonel SHULER. There are no suitable permanent quarters available for nurses who are to be assigned to the new hospital. The nearest quarters are in mobilization-type buildings in the old hospital area and are a mile away.

You understand, sir, that the old hospital is across the main highway from the post proper. It is essential that the new hospital be completed with permanent barracks and this is a request, sir, to get these nurses into permanent barracks at about the same time the hospital is completed.

COMPLETION OF BASEMENT (MATERIALS LABORATORY)

The next item is the completion of the basement in the materials lab. This is an operational requirement to permit installation and use of equipment presently on hand for conducting various tests, crystal growing, octane-rating tests, fabricating, and tests of plastics and rubber materials.

This work cannot be performed on the first floor of the materials lab as the floor design is not sufficiently strong to support the weight of the machines; nor can work be conducted close to other safety hazards. Certain machinery has already been installed in the basement but it is surrounded with a dirt floor and we have unsafe working conditions and lack of adequate ventilation. This would give us a very reasonable square-foot cost, sir, for valuable space which we need, at $104,000 for a gross area of 14,456 square feet.

HEAVY EQUIPMENT MODIFICATION SHOP

The next item is a heavy equipment maintenance shop in the engineering proving ground area. This shop is required to modify various types of heavy engineer equipment during tests to adapt it to the best military use with minimum maintenance. This is not just a maintenance facility, sir, but it is in connection with the research and development of heavy engineer equipment, bulldozers, road graders, cranes, and that type of equipment. It is needed in the training of the personnel as well as doing the repair of the equipment. Modifications will include repairs, disassembly, changes, and various other functions for the best performance under the worst condition we can test this equipment.

PRECISION MACHINE SHOP

The next item is the precision machine shop in the engineer research and development lab area, page 132, for $52,000. The quality of the machining obtained in the existing maintenance shop does not meet the high standards presently required for precision work. This project is needed to meet research and development requirements for precision machining to tolerances of one ten-thousandth of an inch or less.

Mr. SIKES. I am not sufficiently familiar with mechanical and engineering activities to express an opinion but I want to ask this question. Why would it not be practical to combine a number of these shops? Certainly you would achieve greater economy in construction if you combined under one roof a number of these shops rather than to have separate buildings. Would that not be practical?

Colonel SHULER. Mr. Chairman, the Engineer School has an engineering research and development lab which is fenced off. It engages in a great many classified projects. It has a permanent building plant. Now, that particular area, sir, in which the precision maintenance

shop would be located is quite a distance away, about 3 or 4 miles, from the engineer proving grounds which is across the highway and where we have large land areas to tear up with our bulldozers and our earth-moving equipment.

Mr. SIKES. This may not be the proper place to start talking about combining facilities. This particular one might not be practical. But I note throughout these hearings you have followed the same general pattern. You have a number of shops at different installations. Have you considered the practicability of combining facilities rather than constructing separate buildings for each of the activities that have been outlined?

Colonel SHULER. Yes, sir; we have done that from the using station level clear on up through the complete review of the program. In some cases we have done just that, combined the building. For instance, you take the post engineer building that I defended yesterday where we put everything into one building. We could have put little shops around the post. That is an example of it. I know there are other examples in the program.

Mr. FOSTER. At White Sands, yesterday, we had a laboratory which was identified as an addition to the frequency control lab.

Colonel SHULER. So I feel we do that whenever we can demonstrate that it is more economical and we can still carry out our mission in a satisfactory manner.

Mr. FOSTER. Mr. Chairman, I am informed by the engineer witnesses that this particular precision machine shop that is under discussion will be a wing to an existing building.

ENLISTED MEN'S BARRACKS

Colonel SHULER. The next item is enlisted men's barracks with mess. This, sir, is an example of the type of barracks I cited yesterday at a school where we do not have the necessity for unit integrity of tactical units—we build a larger barracks. This is a 526-man barracks and we run a consolidated 526-man mess. And this, sir, is for 526 spaces which, added to the 2,140 we already have in permanent barracks, alleviates the difference between what we have and 5,824 total requirement.

This actually, sir, is 2 of the 263-man barracks put together. That is the way we do this.

BATTALION HEADQUARTERS BUILDINGS

The next item is two battalion headquarters buildings, $88,000. These proposed battalion headquarters buildings are needed for the accomplishment of functions of the engineer battalion and control and management of troops. There are no buildings for battalion headquarters located within a mile of the new barracks area. In our criteria for the buildup of permanent installations under the permanent peacetime army goal we provide, sir, a battalion headquarters building for each battalion.

COMMISSARY

The next item, sir, is a commissary. This is required to serve 3,900 registered patrons as off-post food markets have not developed as rapidly as family housing around the area.

Mr. SIKES. That is an expensive building. Is it in keeping with cost of constructing a commercial grocery to accommodate the same number of people? Do you know?

Colonel SHULER. I believe, sir, that it is. I would like to furnish a little more data here to back that up so you can see how much the sales per month, and I believe from that we can conclude that this is about what you would have if you built it off the post.

Mr. SIKES. I wonder if you could develop, definitely ascertain for the committee what the average chain grocery would expect to pay for a building which would accommodate that many people? Could you do that?

Colonel SHULER. We will do that. I would like to say that this is $12 a square foot, which I am pretty confident is about what it runs on the outside but we will furnish that, Mr. Chairman. I would like to point out in the record that the present mobilization type of building we are using of 9,500 square feet as against the 23,000 we are asking for—and I must add on to that 6,000 square feet of bulk storage which is almost a mile away from the commissary we are presently using—is overtaxed by an average monthly sale of $125,000. The location is also poor. It is down near the coal yard, down near the railroad tracks. The building is neither insect nor rodent proof and the lighting is of low intensity and the walls are not insulated. We feel, sir, that it is time to replace this absolutely unsanitary condition on the permanent posts such as Fort Belvoir with something that is suitable. We will furnish that other information, sir, for the record.

(The information requested is as follows:)

SUPERMARKET, DISTRICT HEIGHTS, MD.

Bid, February 1955; gross area, 19,500 square feet

Steel frame, block, brick and stucco exterior finish, dry wall interior finish, one story with partial basement, 21-foot wall height, direct-fired gas heating with ducts, air conditioned, meat and produce areas refrigerated, walk-in cooler boxes, special cooler cases, freezer cases and parking lot.

	Amount	Cost per square feet
Structure	$189,000	$9.70
Plumbing	35,000	1.79
Heating and ventilation	21,000	1.08
Air conditioning	19,000	.97
Electrical	24,000	1.23
Built-in equipment	22,000	1.13
Total	310,000	15.90

Above costs exclude architectural and engineering fees, land, landscaping, special foundations, movable furnishings and outside utilities beyond the 5-foot line.

Data extracted from publication titled "Costs and Trends of Current Building Construction" as published by construction news division of F. W. Dodge Corp., 119 West 40th Street, New York 18, N. Y. Volume I, No. 1, edition C, page 18C.

SUPERMARKET—YORK, PA.

Bid, February 1955; area, 18,340 square feet

Wall bearing structure, brick, block and stone exterior finish, terrazzo and concrete finish floor, plastered interior wall finish, 1-story with no basement, 20 feet average wall height, combination steam heat and air conditioning system.

	Amount	Cost per square foot
Structure	$98,500	$5.37
Plumbing	7,000	.39
Heating and ventilating	7,600	.42
Air conditioning	14,694	.81
Electrical	12,927	.71
Built-in equipment	11,000	.60
Total	151,721	8.30

Above costs exclude architectural and engineering fees, land, landscaping, special foundations, movable furnishings and outside utilities beyond the 5-foot line.

Data extracted from publication titled "Costs and Trend of Current Building Construction" as published by construction news division of F. W. Dodge Corp., 119 West 40th Street, New York 18, N. Y. Volume I, No. 1, edition C, page 18C.

COST DATA ON SUPERMARKETS IN THE WASHINGTON METROPOLITAN AREA

Information obtained from the architect for a large grocery chain (names confidential) indicates the price range for supermarkets to be $10.50 to $15 per square foot, including outside utilities and parking lot but excluding architectural and engineering fee.

Above costs include refrigeration and walk-in refrigerator but exclude all furnishings and shelving.

TEST LOOP

The next item is a test loop in the engineer proving ground area. Fort Belvoir has the responsibility for testing of all mobile equipment. It is a Corps of Engineers responsibility which is given to it by the Department of the Army. Typical of the items that we test down there are high-speed rubber-tired tractors, engineer machinery trailers, motorized graders, motorized scrapers, truck-mounted cranes, wheel-mounted cranes, special truck-mounted vans, rubber-tired ditchers, just to name a few—mostly heavy equipment. The existing test loop is 22 feet wide, concrete, 1.1 mile in circumference, and it is used to test this equipment, sir, to the breakdown point. In other words, it is very rough on this test loop in testing this equipment, just like you would over the commercial automobile manufacturer's test run. The existing loop was built under wartime conditions in 1941 and 1943 designed for a maximum of 25 tons. We find, sir, we need one for 80 tons, in some instances. Therefore, we wish to replace it. That item is $170,000.

CONTROL TOWER (DAVISON FIELD)

The next two items are for Davison Field. The first one is a control tower.

Mr. SIKES. Tell me, is Davison Field used for training or for testing or only for the convenience of personnel?

Colonel SHULER. Mr. Chairman, the Corps of Engineers is one of the technical services in the Army to which Army aircraft is organic-

ally assigned. Davison Field is used in two ways. One is for the training within the Corps of Engineers. The other, and I believe I must go off the record, sir——

Mr. SIKES. Off the record.

(Discussion off the record.)

Colonel SHULER. I have a list of the type of planes we have, if you are interested in that.

Mr. MILLER. At Belvoir?

Colonel SHULER. Throughout Army aviation.

Mr. MILLER. We know that.

Mr. RILEY. I have a pretty good idea what it is.

Mr. FLOOD. Let me ask you about this tower. With reference to the type of tower construction, style, machinery, equipment, personnel, how does this control tower that you proposed for Davison Field compare with the accepted and customary CAA civilian tower for the same purpose?

Colonel SHULER. Sir, the factors that we use to compute this requirement were the CAA criteria and requirements and Air Force criteria requirements. I believe they, in general, also use CAA requirements.

Mr. FLOOD. This is the opposite number of a CAA civilian control tower at airport X.

Colonel SHULER. Just about that, Mr. Flood.

Mr. FLOOD. But with such a limited operation as you suggest and keeping in mind, we hope, the remote contingency of the off-the-record use that may be made of this, and keeping in mind as well that there are many, many airports, civilian airports, throughout the United States operated by municipalities, cities, operated by joint counties in every State of the Union, that do not and will not for some time, if ever, qualify for a control tower because of the unit requirements and the criteria set down by CAA; by that I mean before City X can get a control tower, it must meet certain minimum requirements of loading and landing, and so on and so on. Now, there are many, many towns, many, many airports, who have been competing, who have been petitioning CAA for many years, year after year, and there are Congressmen coming before the subcommittee of which I happen to be a member as well as this one, year after year, begging and pleading for these control towers. And they become quite a prize among our colleagues in their competition, each with the other, if you know what I mean. But you don't seem to have much of a traffic count here, do you—or do you?

Colonel SHULER. Yes, sir; we do. Even without the assignment of this unit which I mentioned off the record, sir, we have 3,000 flights a month in and out.

Mr. FLOOD. Suppose at this point in the record, to protect your clients from the kind of attack I am sure you will get if perchance somebody sees this, if anybody thumbs through this justification sheet on the floor and their eye strays upon the words, "control tower," it gets avid attention.

Colonel SHULER. May I say, Mr. Flood, that it is the intention of the Army to station additional Army aircraft at Davison Field in the near future. This control tower is only 20 by 20 feet. It is not a large one. To me, it is good insurance to protect $15 million to $20 million worth of aircraft. It is just like fire insurance on a build-

ing. If you do not have a control tower, you have a dangerous situation.

Mr. FLOOD. CAA controls and this committee are going to be much more interested in the safety of personnel than we are the aircraft. It is not the Russian Air Force. Now, you show us in the record where this justification meets certain criteria that the CAA set up not only for the physical structure, but as minimum criteria for building, or participating in the building, of control towers at civilian airports. If this is questioned, Mr. Sikes will be able to show by analogy it is justified. You can get it.

Colonel SHULER. May I clear my mind on your request? You desire us to put in the record the criteria that we have that are CAA that we have met.

Mr. FLOOD. Put that in first. Then justify or show whether it is justified or not; show as you have indicated your minimum landings and takeoffs for a certain period of time. I am sure you have that right there. But to save time now, put both of those justifications in: the minimum criteria that you have met, and the takeoffs and landings so there will be some analogy with the CAA minimum criteria for award towers.

(The following information was subsequently furnished:)

The design criteria for proposed flight control tower at Davison Army Airfield were drawn up jointly by the Corps of Engineers and the Signal Corps to meet operational and technical specifications of CAA. Existing temporary flight control tower was troop constructed as an expedient item and does not employ CAA design specifications. CAA criteria for establishing and removing control towers at civilian airfields are as follows:

(*a*) To establish a control tower a minimum of 24,000 operations (landings and takeoffs) per year are required and a certified air carrier must be using the field.

(*b*) If operations fall below 18,000 per year, the tower is closed down.

Davison Field now has approximately 36,000 operations per year and this is expected to increase. Thus it exceeds CAA criteria in this respect.

Colonel SHULER. We will furnish the criteria. I would like to put in the record right now that the use of the field is 3,000 flights per month, average, and that we intend to increase this usage in the near future when we station additional aircraft at Davison Field.

Mr. FLOOD. As far as the security will permit, indicate the number and types of aircraft that are permanently stationed on this field.

Colonel SHULER. We will furnish that.

(The information requested is as follows:)

The total number of aircraft assigned to Davison Army Airfield is 45, as follows:

	Authorized	On hand	Authorized	Actually assigned (on hand)
(*a*) *The Army aviation detachment*			22	19
L–23 twin engine airplanes	9	8		
YL–26 twin engine airplanes	2	2		
L–20 single engine airplanes	2	2		
L–19 single engine airplanes	5	5		
H–13 reconnaissance helicopters	3	2		
H–19 utility helicopters	1	0		
(*b*) *509th TC Helicopter Co*			23	17
H–21 cargo helicopters	21	15		
H–13 reconnaissance helicopters	2	2		
Total			45	36

Mr. SIKES. The facilities at Davison obviously are poor. If the commission of the field justifies any appreciable activity there, I can understand that you would need new facilities but the committee wants to be sure of its ground. Go ahead.

WATER AND SEWAGE SYSTEMS (DAVISON FIELD)

Colonel SHULER. The next item is also at Davison Field which incidentally, is 4 miles from the main post at Fort Belvoir. This is a project for $113,000 required to provide an adequate water supply for fire protection and domestic use for approximately 60 people. The sewage collection and disposal is essential for sanitation and health. At present, water is supplied from an existing well which will only satisfy the needs for domestic use. Since the location of this airfield is at a remote area water distribution is actually nonexistent.

Mr. FLOOD. What do you want water and sewage disposal for at a remote place 4 miles from the main area of Belvoir, such as Davison Field? Do you have troops stationed at Davison Field? Do you have other than the 2 or 3 control tower people or are troops in barracks there or do you simply land, get off the plane, get in a motorcar and drive into the base? Do you need this expensive sewerage and water if there is nobody there?

Colonel SHULER. Mr. FLOOD, I feel it is a modest request but in answer to who is there besides the people who would operate the tower, there are the operations building people, maintenance personnel who do maintenance on the various aircraft in the maintenance hangars we use there. And there are operations people to support the 3,000-flight-a-month load.

Mr. FLOOD. Suppose on the last page, where you are putting in these others, this table of justifications, you insert additional paragraphs as to the nature and type of installation at Davison Field. I have the impression from what you have just said that it is a landing strip with a control tower 4 miles out in the woods someplace. If you have anything there, indicate so far as security will permit what you have there, if it is more than a cow pasture or what it is.

(The information requested is as follows:)

(*a*) Existing facilities at Davison Army Airfield are as follows:

(1) Runway, asphalt concrete, 3,000 x 75 feet.

(2) Taxiway, asphalt concrete, 3,000 x 75 feet.

(3) Aircraft parking ramp and apron, asphalt concrete, 200 x 200 feet.

(4) Airfield operations and administration building, temporary wood frame construction, 20 by 60 feet, with flight control tower, same construction, on top having cab, 10 by 10 feet.

(5) Airfield fire and rescue station, temporary wood frame construction, one stall, without quarters or messing facilities.

(6) Hangar, temporary wood frame, floor dimensions, 60 by 40 feet, which is incapable of accommodating more than one airplane at a time and generally unsuitable for the purpose of aircraft maintenance.

(7) Aircraft parts supply building, temporary wood frame construction, 20 by 80 feet for the (MDW) Army Aviation Detachment.

(*b*) Permanent facilities under construction from fiscal year 1955 MCA program are as follows:

(1) Completion of Butler hangar, 160 by 130 feet, with heat.

(2) Aircraft parts and supply building, 160 by 20 feet, adjacent to Butler hangar, for (MDW) Army Aviation Detachment.

(3) Operations and administration building for (MDW) Army Aviation Detachment. This building will also house the airfield weather station.

(4) Airfield central heating plant to support permanent construction under fiscal year 1955 MCA program.

(c) The total number of persons now stationed at Davison Army Airfield is 207, broken down as follows:

	Authorized	Actually assigned (on hand)
(1) The Army Aviation Detachment:		
Officers	11	9
Warrant officers	1	1
Enlisted men	90	82
Civilians	6	6
(2) 509th TC Helicopter Company:		
Officers	12	4
Warrant officers	34	33
Enlisted men	67	50
Civilians	0	0
(3) 153d TC Cargo Field Maintenance Detachment:		
Officers	1	1
Warrant officers	1	1
Enlisted men	53	44
Civilians	6	6
Total	282	207

(d) By December, 1955, the full complement of persons authorized is expected to reach a total of 282.

Colonel SHULER. It is a little more than a cow pasture, Mr. Flood. We can show you a map with facilities on it.

Mr. FLOOD. I would like to see it.

Mr. SIKES. I think that would be a good idea.

(Discussion off the record.)

Colonel SHULER. We will bring a copy this afternoon and show the committee a map of Davison Field, but I will say there is considerably more planned than a strip and control tower.

Mr. FLOOD. All right.

FAMILY QUARTERS

Colonel SHULER. The next item, sir, at Fort Belvoir, is a request for $1,445,000 to fund new authorization for family quarters; 114 sets of noncommissioned officers' family quarters. The situation there, sir, is that the total requirement against the permanent peacetime Army is for 1,720 units. We have assets of 1,058 of which 450 are Wherry housing, leaving a deficiency of 662 or 37 percent of the total requirement.

Mr. SIKES. What is the life expectancy of your Wherry housing this year, what is your educated guess?

Colonel SHULER. They speak of 50-year amortization. I can show you some which I don't think will last 5 years. To my way of thinking, sir, Wherry housing tends toward the substandard——

Mr. FLOOD. Who spoke of 50 years, the Army when they justified the budget request or who?

Colonel SHULER. No, sir; that is in the scheme of financing the Wherry housing. If you took $90 a month as the average quarters allowance and multiplied it by 50 years, it is $54,000, which is the ultimate cost for a Wherry house. That is one way of looking at it. I have lived in a Wherry house and built some, and I feel that with the $10,000 you are limited to, you cannot get a house that gives you low maintenance cost. In addition, a noncom or a junior grade

officer is not able to pay rent for a 2- or 3-bedroom Wherry house; nor is it adequate in space for a senior officer.

Mr. MILLER. Are the criteria the same everywhere?

Colonel SHULER. No, sir; but you are under the same cost limitation, under the same scheme of financing. You can vary your design. You can build duplexes instead of singles. I am referring to some at Carlisle Barracks where I lived for a year when I attended the Army War College and my utility bill was around $45 a month, sir, in the winter time, for fuel alone, for gas alone, because of the bad insulation in the walls. That is because of lack of money to do a better job.

So far as the length of time that Wherry housing will last, I don't think it will last nearly as long as a set of permanent quarters.

Mr. FLOOD. What was the intention on Wherry? Was it intended to last 50 years or is that just a figure of something you reach as a result of amortization?

Mr. SIKES. About the same as FHA, same general category, 25- or 30-year house. I have seen some good ones and I have seen some poor ones.

Colonel SHULER. It is just a question of amortization.

Mr. RILEY. I have seen some awfully good Wherry houses; I have seen some not so good, but some of the best I have seen have been in Florida. I think they meet every requirement.

Colonel SHULER. If you can get a break, sir, on the cost in the area in which you are constructing and get good bids, maybe under your $10,000 you can build a suitable house, but where the costs are high, sir, and unless you get very good bids you can't get much for your $10,000.

Mr. RILEY. I realize costs vary in different sections of the country but I don't think we want to condemn the whole program because you do get a few that are not up to standard.

I could name some other places.

GRANITE CITY ENGINEER DEPOT, ILL.

Colonel SHULER. The next station, sir, in the Corps of Engineers is Granite City Engineer Depot, on page 139 in the big book, and family housing on page 334 in the small book.

Mr. FLOOD. While you are on this, will you, sometime when you are running over this record, would you insert and from now on do the same thing, if there is such an incident, any time in any of these projects for which you are asking funds, are brand new installations, will you just say that it is whenever you run into one?

Colonel SHULER. I can state, Mr. Flood, that there is no new, brand-new installation in this program other than in Potrero Hills, Calif.—the west coast ammunition unloading facility.

Mr. SIKES. Off the record.

(Discussion off the record.)

Colonel SHULER. There are two items at Granite City Engineer Depot beside the family housing. One is for the blocking and banding shop, $216,000, and the other is for an equipment processing shop, $904,000.

BLOCKING AND BANDING SHOP

The first item, blocking and banding shop is required to replace an existing structure built in 1943 which is 60 feet by 400 feet. The

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facility will be utilized principally to prepare items of engineer equipment for shipment by rail. These include, sir; every item in the engineer repertoire from the largest pieces of earth-moving equipment on down. The secondary use is receipt and handling of equipment. As you said, much of this equipment which is processed for this facility is large and very heavy.

Mr. SIKES. What do you mean by blocking and banding?

Colonel SHULER. Sir; in preparing something for shipment, when you put it on flatcars you block it so that when the freight is moving it doesn't roll around—it is quite a process on a big piece of equipment. Banding is the metal or steel banding that they put around items in order to secure them for transport.

Mr. SIKES. What are you going to do with existing facilities?

Colonel SHULER. Due to the original structural limitations and deterioration of the load-bearing members, current operations on existing structure are seriously restricted. We cannot realize the required efficiency. The maintenance costs on this existing facility are excessive. The facility is a hazard and we are going to demolish it, sir.

EQUIPMENT PROCESSING SHOP

The next item, the same station, on page 141, is the equipment processing shop. This facility will be utilized for processing equipment in storage and equipment being prepared for domestic and overseas shipment in order to prevent deterioration. These operations involve inspection, assembly and disassembly, cleaning and application of preservatives. The facility will process about 800 items per month. The present facility, which is a wood frame constructed building, which is only capable of processing about 600 items per month is inadequate.

Mr. SIKES. How does it happen that all of this processing for a shipment is done in midcontinental United States?

Colonel SHULER. The only thing I cay say to that, Mr. Chairman, is that I believe we are down now to 2 engineer depots, 1 being Granite City, the other Marion Engineer Depot.

Mr. SIKES. Wouldn't it be cheaper to have the supplying company do that before delivery?

Colonel SHULER. You mean to preserve these things?

Mr. SIKES. From the description here, I understood this was primarily for shipment.

Colonel SHULER. This is a storage and supply depot. It has to stock these items over a period of time, as the requests come in from the ports of embarkation and various other——

Mr. SIKES. Why don't you have the supplying factory process equipment for shipping rather than do it yourself?

Colonel SHULER. If we could have them do that and send it to the port of embarkation and directly overseas, that would probably be the thing to do, sir, but we don't feel we can operate completely that way. We feel we have to ship many items into a depot, classify them and sift all our requests and ship it out from there.

Mr. SIKES. Have you explored the possibility that I suggested?

Mr. FOSTER. Mr. Chairman, in those items of supply where it is possible to establish the demand level for various commands and get the phasing of the demand pinned down, that is now being done by

the Army supply system. Shipments are made from supplier to the ports. The items that this building will handle are the types on which the demand is rather irregular, the lead time in their procurement is long, and they require this special handling.

Mr. MILLER. Is there not also another factor that in some instances the destination affects the type of crating, shipping, and so on, and sometimes the stuff must be shipped by air?

Colonel SHULER. That's right, sir.

Mr. MILLER. That might be one reason, Mr. Chairman, why you couldn't bale it in advance.

Mr. SIKES. All right; go ahead.

FAMILY QUARTERS

Colonel SHULER. The next item is 50 sets of family quarters.

Mr. FLOOD. This equipment and processing shop at this base at Granite City, do you bring in damaged equipment and used equipment from the field and repair it at this engineer depot at Granite City? Is this also an Army engineer repair depot just for the Engineer Corps or for the Army?

Colonel SHULER. For the Engineer Corps and for any engineer-type equipment, any units assigned other than to the Corps of Engineers.

Mr. FLOOD. You bring the stuff to Belvoir or any engineer area at all and if there is anything broken or chipped or damaged can you repair it here? Is that the kind of operation it is?

Mr. FOSTER. They do major repair; the engineers, as the other technical services, have field maintenance shops located in various parts of the country that do minor repair work. But major overhauls, complete rebuild, are done at depots like Granite City.

Colonel SHULER. The 50 sets of family quarters, sir, are 34 noncom officers, 12 company grade, 3 field grade, and 1 general or commanding officer. $702,000. We have a 100-percent deficiency there against a 136 requirement. We have no assets. Sixty-two of these, 62 percent of this request is to replace inadequate quarters which are presently occupied on the post, sir.

MARION ENGINEER DEPOT, OHIO

The next station is Marion Engineer Depot, the other engineer depot. In the items for this installation, sir, the first two go together, a hardstand ($830,000) and a railroad spur ($233,000). The third item is a fence ($83,000).

HARDSTAND

The first item, the hardstand, is open storage area required for the storage of both serviceable and unserviceable equipment. Now, the value of this equipment that is in open storage is about $95 million. Due to the close proximity of the base maintenance this site will be used principally for storage of unserviceable equipment prior to repair and returned to stock or to the user. Its location will reduce handling costs and time to a minimum. At present, an open storm drainage ditch extends the full width of this project. By including a dual 72-inch pipe culvert, additional area will be available and maintenance of the ditch will be decreased. Trucks are presently stored in the

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unstabilized area and in the winter it is almost impossible to move the equipment around in the mud, sir.

RAILROAD SPUR

A companion item to this is the railroad spur. This track is required to serve approximately 180,000 square yards of this additional hardstand we are asking for, sir. It is needed to eliminate excessive handling. There is no existing railroad track in the site for the proposed hardstand at the present time.

Mr. FLOOD. This railroad spur, is that a railroad spur or trackage within the yards of the engineer depot?

Colonel SHULER. That would be to serve the hardstand which is the first item. There would be about 13,000 lineal feet of 90-pound rail track.

Mr. FLOOD. There is no spur connecting with a railroad line?

Colonel SHULER. We are not building to connect with the line. It would connect with a line through other trackage, but this is on the post proper.

Mr. FLOOD. This particular railroad spur will not tie in with any main-line railroad; will it?

Colonel SHULER. It ties in with a main line.

Mr. FLOOD. Through other spurs, but is there a direct connection on the spur?

Mr. FOSTER. This will go through an existing spur. It is an extension of our spur system.

Mr. FLOOD. Where is the lineage? Where is the trackage on this particular spur?

Mr. FOSTER. In the area colored in pink on this map [pointing].

Mr. FLOOD. Where are the existing railroad facilities, not yours, but the line?

Mr. FOSTER. Here is the Erie Railroad and the New York Central.

Mr. FLOOD. This is merely a link in your own chain of spurs?

Mr. FOSTER. That is correct, sir.

FENCE

Colonel SHULER. The last item at this station, sir, is the fence, $83,000. This proposed fence is required to replace an existing emergency type fence constructed in 1942 which is only a 5-strand barbed wire fence, 4 feet high, with untreated wooden posts. The present fence does not provide any protection to speak of. Approximately 60 percent of the fence should be replaced immediately at a cost of approximately $18,000 if the present fence is to be retained. We would like to avoid spending that $18,000 and get a proper fence for the $83,000.

TRANSPORTATION CORPS FACILITIES

Mr. Chairman, we come to the Transportation Corps. I have here this morning Major General Yount, Chief, Transportation Corps.

Brooklyn Army Base, N. Y.

The first station in the Transportation Corps is Brooklyn Army Base which was established in 1918. The two items there are: Rehabilitation of the electrical system, $748,000, the final increment, and rehabilitation of the sanitray sewer system, $307,000. These are to correct serious deficiencies in an old, outmoded system at this post.

REHABILITATION OF ELECTRICAL DISTRIBUTION SYSTEM

This item, the first one, the rehabilitation of the electrical distribution system will complete the rehabilitation of this system that was installed in 1917. The first phase was authorized at $1,264,000 provided in the fiscal year 1955, MCA execution program. This project includes the replacement of a low tension switchboard with new circuit breaker equipment, replacement of distribution feeders, replacement of nonstandard voltage motors with standard voltage units, and removal of old 6,600-volt transformers and switching equipment which is no longer manufactured and for which we connot get spare parts.

REHABILITATION OF SANITARY SEWER SYSTEM

The second item is rehabilitation of the sanitary sewer system and this is required for control of water pollution in accordance with the water pollution control law, Public Law 845, 80th Congress, and the Executive order of the President of the United States. The interstate sanitary commission which functions under compacts with the States of New York, New Jersey, and Connecticut, as ratified by the Congress has directed the city of New York to complete its construction program to control pollution of waters by 1959. We desire to stop discharging raw sewerage into the harbor, sir, which we are doing at the present time

The next station is Charleston.

Mr. Flood. On the Brooklyn Army Base, why is there such a high percentage of officers to enlisted personnel on that base? I notice permanent target there, 242 officers, 338 enlisted men.

General Yount. It is almost entirely a civilian-operated facility, Mr. Flood.

Mr. Flood. That still does not answer my question. Why do you have 242 officers and 388 enlisted men?

General Yount. The enlisted men there are limited to very few duties, Mr. Flood, security being primarily one of them. So far as the operating facilities of the port are concerned, they are handled either by civilians or by contract. The greatest amount of our work is by contract. So the officers are there in a supervisory capacity over contract enforcement.

Colonel Shuler. It takes just as many officers to supervise a civilian, sir, as it does to supervise an enlisted man, in general.

Mr. Flood. We won't go into that.

Charleston Transportation Depot, S. C.

Colonel Shuler. At Charleston Transportation Depot we have three items: Stabilized hardstand, extension of the water distribution system for fire protection; and roads in the warehouse area; the total

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amount of money being $329,000. The first item is stabilized hardstand costing $183,000. This project is required to provide adequate dry storage area for approximately 300 vessels and other Transportation Corps items of equipment. The present practice of dry storing vessels on wooden blocking costs $500 per vessel which will make the total initial cost of blocking as now performed approximately $150,000. With suitable hardstand we can decrease the size of the blocks and creosoted timbers which we use on the bottom row of blocks. This will reduce the initial cost and will result in savings we figure, sir, from study, of about $60,000 if we are allowed this project, sir.

The next one is extension of water distribution system for fire protection, $25,000. This is to provide adequate fire protection by addition to the water distribution system and 17 additional fire hydrants so that Government property and strategic storage valued in excess of $100 million may be protected.

The next item on page 153, roads in the warehouse area costing $121,000, this project is required to provide access to the warehouse and interior road net within the area.

Mr. FLOOD. On the other item, colonel, on the extension of the distribution system, will you insert a paragraph there indicating that this additional requirement of fire hydrants is generally in keeping with the best fire practices of so many hydrants per so many hundred yards, and so on? Are you within the rule of reason here compared to the best accepted fire fighting practices?

Colonel SHULER. We will furnish that, Mr. Flood.

(The information requested is as follows:)

The additional requirements for fire hydrants is in keeping with good engineering practices and accepted fire-prevention criteria.

The last item at Charleston Transportation Depot, continuing on the roads, the existing roads are unimproved and were constructed by the use of a bulldozer, just to stabilize them enough for traffic. The expansion of the dry storage area requires expansion and servicing of the road net to permit access to stored materiel by heavy material handling equipment and fire apparatus. These items that we have in dry storage, small vessels and Transportation Corps land equipment require considerable maintenance and inspection, sir, and we have to move them in and out of there for shipment under most any kind of weather conditions and we need this road network to accomplish that.

TUESDAY, JUNE 28, 1955.

AFTERNOON SESSION

WEST COAST AMMUNITION TERMINAL, POTRERO HILLS, CALIF.

Mr. RILEY. Gentlemen, we will go ahead with the hearings.

Colonel Shuler or General Lawton, will you present the next witness, please, sir?

General LAWTON. Colonel Shuler is present and he will continue his detailed justification of the construction projects.

Colonel SHULER. Mr. Chairman, we have been testifying in the Transportation Corps section of the book. With your permission I

would like to take up the Transportation Corps requests for the West Coast Ammunition Terminal at Potrero Hills, Calif., so that General Yount, the Chief of the Transportation Corps, can keep a very important engagement he has at 2 o'clock. Is that all right?

Mr. RILEY. Very well. We will be glad to hear the general at this time.

Colonel SHULER. The page number is 187 in your original book.

Mr. RILEY. I believe this is the only new item you are asking for?

Colonel SHULER. It is the only new installation we are asking for.

I would like to put in the record some general data prior to the time General Yount testifies. We are requesting at the West Coast Ammunition Terminal the funding of two items: "Land acquisition, $3,209,000," and "Dredging, $9,651,000." The project is the Potrero Hills Ammunition Terminal, the initial increment of which is proposed in the fiscal year 1956 bill before us.

The first increment would provide for the fee acquisition and restrictive easement on a total of 22,000 acres of land and dredging of a 32-foot channel through Montezuma Slough, to the site of future piers.

The total acquisition cost is $12,860,000. The project will be a port for the shipment of ammunition by oceangoing vessels to the Army and Air Force throughout the entire Pacific area and Far East. It must not be confused with an ammunition depot. Ammunition passing through Potrero Hills would be in transit and must be handled in large concentrations without the safety features of dispersal and earth cover used in the normal depot, where ammunition stocks are stored for long periods of time.

The Department of the Army does not intend to do any construction at Potrero Hills prior to M-Day. We propose to acquire necessary land at this time to prevent enroachment by buildings and other facilities which would be endangered by close proximity to heavy ammunition shipments in the future.

Dredging is to be undertaken so as to avoid delay in early port operations after M-Day. Dredging is the most time-consuming operation in the development of such a port.

As you know, we cannot predict the time of M-Day. It may never occur. Unless and until it occurs there will be no change in the present use of Potrero Hills area. Its use by sportsmen and others will not be restricted until a war forces us to build the port.

Ammunition ports are difficult to locate. You will appreciate that they require an isolated site located on deep water and with comprehensive road and railroad transportation facilities nearby. Such ports also require sheltered anchorages and must be located away from open roadsteads. It is most desirable to have such ports decentralized with respect to ammunition storage depots and manufacturing plants.

The Army surveyed the entire Pacific coastline and prepared detailed surveys of the eight most promising locations. After this careful analysis only the Potrero Hills site on Grizzly Bay northeast of San Francisco proved feasible. The Army considered expansion of the Navy port at Port Chicago just due south of Potrero Hills location, but this is impracticable. Under accepted safety standards Port Chicago does not now have enough land even for Navy requirements. The Navy has requested Congress to approve purchase of 4,500 acres adjacent to Port Chicago to make it safe.

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During World War II ammunition was shipped through unsafe ports with tragic results when accidents occurred. The increased fire power of the Army and Air Force increases the shipment demand of ammunition to a point where we cannot impose the danger of such shipments on existing port facilities.

In 1952 the Army began the development of a series of several port locations. Potrero Hills is the fourth in this series and the first on the west coast.

I might add, Mr. Chairman, that the first facility was at Wilmington, N. C., on which we are just completing construction. The next was King's Bay, Ga., on which we will complete one-third of the construction at this time, and the rest will occur after M-Day. The third is at Point Aux Pins, Ala., where we will just do our land acquisition and dredging prior to M-Day.

This Potrero Hills site is the fourth, and we have one additional site which we will ask for next year, at West Calcasieu, La. That completes my general statement, sir, on the project.

Mr. RILEY. Colonel, were not two of these contemplated on the west coast, or is this the only one?

General YOUNT. This is the only one contemplated on the west coast at this time, Mr. Riley.

Mr. RILEY. I am familiar with Wilmington and King's Bay and the one in Alabama, but I was under the impression there were two on the west coast. The committee is very sympathetic to these projects because we realize in handling this ammunition it should be kept away from the large urban centers.

Colonel SHULER. Yes, sir.

Mr. RILEY. And the larger ports where you have other shipping.

Colonel SHULER. We desire if we possibly can, Mr. Chairman, not to use any more unsafe ports if war should ever occur again. That is our goal, because the disasters we have had so far show us we should not take that chance in the future if we can possibly avoid it.

Mr. RILEY. I am sure I am voicing the sentiments of the committee when I say we are in entire sympathy with the project.

Colonel SHULER. I believe that in making our study and pinpointing 8 possible sites on the west coast it may be that you have heard of 1 of the other 7 we eliminated because this is by far the most economical and best located site.

Mr. RILEY. I was under the impression you wanted 2 on the Pacific coast and 3 on the Atlantic coast, or maybe 1 on the gulf.

Colonel SHULER. We want it so that if M-day ever occurs we can shift into our M-day schedule of construction so that a certain number of months after M-day this will go into operation to fill our needs.

Mr. MILLER. I suppose you have your land connections here also, or you will get them at the same time—your rail connections?

General YOUNT. Yes, sir. We are served by 2 rail connections and have 2 interstate carriers that are very close.

Mr. RILEY. So that would not hold you up?

General YOUNT. No, sir.

Mr. RILEY. How long will it take you to get operational walls in after M-day?

Colonel SHULER. I would say that to get the operation of one of the three piers in times like we would have after M-day—and we would be pushing the thing then—we could be operating in less than a year.

Mr. RILEY. Is it or is it not advisable to put then about one-third of the facilities in here?

Colonel SHULER. Off the record, Mr. Chairman.

(Discussion off the record.)

Mr. RILEY. Have you any other questions, Mr. Miller?

Mr. MILLER. No.

Mr. RILEY. Is that the only thing General Yount will testify on?

Colonel SHULER. Yes, sir.

Mr. RILEY. We will excuse you then, General Yount.

General YOUNT. Thank you, sir.

Mr. RILEY. All right, Colonel Shuler.

FORT EUSTIS, VA.

Colonel SHULER. The next item is Fort Eustis on page 154 of the big book and page 35 in the Family Housing book. The items we are requesting to be funded at this station are an enlisted men's service club, $421,000, and this is the final increment on it; the main post exchange, $340,000; the post chapel with religious education facilities, $527,000; 4 enlisted men's barracks, $2,535,000; an entrance road, $70,000; a field house, $909,000; an officers' open mess with swimming pool, $575,000; a noncommissioned officers' open mess with swimming pool, $633,000; a regimental dispensary, $126,000; 2 battalion headquarters buildings, $102,000; a branch post exchange, $83,000; and 5 battalion classroom buildings, $276,000. In addition to that, 250 separate family quarters costing $3,374,000.

I would like to point out, sir, that recreation facilities are practically nonexistent in this area.

Mr. RILEY. How far is it from a town of any size?

Colonel SHULER. Seventeen miles north of Newport News. This is the home of the Transportation Corps. I will go down each item and justify it.

Mr. RILEY. All right.

ENLISTED MEN'S SERVICE CLUB

Colonel SHULER. The first item is the enlisted men's service club. This is the final increment. The club at this installation was destroyed by fire in 1950. Since that time it has been necessary to use 3 rehabilitated recreational type buildings in widely dispersed areas totaling 17,886 square feet. Two of these buildings are temporary type of 3,663 square feet each, and one a permanent type structure of 10,560 square feet of usable space constructed in 1917. The Army engineer has determined that it has reached the end of its economical life, 37 years, and no attempt should be made to undertake major rehabilitation. The first increment of the complete facility has been financed and construction has begun. This increment will be built as an addition to the basic structure. The nearest large town, Newport News, is 17 miles distant and recreational facilities there are very limited.

MAIN POST EXCHANGE

This project is required to provide a facility to retail authorized sales items to the military population of the installation. The nearest

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shopping centers are Williamsburg, Va., population 6,700, 12 miles distant; and Newport News, population 42,300, 18 miles distant.

Mr. MILLER. How far is it from Yorktown?

Colonel YOST. About 8 miles.

Mr. MILLER. What is the population of Yorktown?

Colonel YOST. 3,000. That is an estimate.

Mr. RILEY. I was going to ask you what you are using now.

Colonel SHULER. The present exchange is located in a consolidated temporary structure totaling 3,890 square feet. Two branch exchanges are provided for the installation to retail authorized sales items to the troops housed in permanent barracks areas. Five temporary mobilization type barracks requiring removal will be salvaged. The existing temporary exchange with its limited space presents a crowded appearance, restricts the scope of items that may be presented for sale, and generally prohibits efficient management of a retail sales outlet. This store has an average monthly sale of $100,000 which could be increased by $10,000 if proper facilities were available. The store serves an average of 2,000 customers per day with a peak day load of 2,600 persons and a peak hour customer load of 500.

I might add that the five temporary mobilization type barracks which require removal on account of building this will be salvaged.

POST CHAPEL

The next item is the post chapel, with religious educational facilities. This project will provide us with 600 seats in the total requirement of 900. We have no chapel capacity in a permanent chapel at this time. We are using for both the post and regimental chapel requirements 5 mobilization type regimental chapels, having a total seating capacity of 1,508. The Sunday school activities are currently held in four temporary type barracks and other buildings that do not lend themselves to religious instruction.

Mr. RILEY. Is it your intention to keep some of the chapels that are there now and then this will be in addition?

Colonel SHULER. That is right. The existing chapels will be retained to meet regimental chapel requirements and to satisfy a deficiency in permanent post chapel requirements.

We will still have a 300-seat deficiency even after we build this 600-seat chapel.

The next item is the four enlisted men's barracks.

ENLISTED MEN'S BARRACKS

These are four 326-man standard barracks. They are to satisfy a large portion of the deficiency which exists between our total requirement for the permanent Army of 7,503 spaces and our present 5,260 spaces. This is an additional 1,304 spaces.

The existing mobilization-type barracks from which we would take troops and put them in the permanent barracks, were constructed in 1940 and 1941. They have passed their life expectancy and are deteriorating at a rate which requires what we feel is too large an amount of R. and U. funds to keep them in a livable status. The temporary buildings rendered excess by this construction will be retained to satisfy mobilization requirements which exist at this

station, or until the master plan requires that they be removed to make place for permanent construction later on.

ENTRANCE ROAD

The entrance road calls for $70,000 and is based on 12,000 vehicles daily, with approximately 1,500 vehicles entering or leaving during the rush hour. The present entrance road cannot support the flow of traffic through this installation.

FIELD HOUSE

The next item is the field house on page 160. This project is required to provide space for indoor instruction, large troop assemblies, and entertainment during inclement weather. The construction will not require removal or destruction of any existing facilities. No similar facility exists.

For permanent operation this installation is authorized a field house and two gymnasiums.

The only existing athletic facility is a temporary gymnasium of 12,476 square feet, which was transferred from Camp Patrick Henry.

Mr. MILLER. What has become of Camp Patrick Henry, as a matter of interest?

Mr. FOSTER. According to my understanding, it has been declared surplus.

Colonel SHULER. I can check that in just a second.

Mr. MILLER. It is not very far from Fort Eustis, as I remember it.

Colonel YOST. Camp Patrick Henry, as it exists now, consists of four warehouses, as I recall it, and we still use the warehouses. The private housing that is there, which is substandard, but is still being used, is still there.

Mr. MILLER. It is usable?

Colonel YOST. It is usable. The main camp was razed and made into an airport and is used by the city of Newport News.

Mr. MILLER. Now Camp Story is sort of a satellite post.

Colonel SHULER. It is a subpost.

Colonel YOST. A very important subinstallation of Fort Eustis.

OFFICERS' OPEN MESS

Colonel SHULER. The next item is the officers' open mess with swimming pool, $575,000. An officers' open mess is required to provide dining and recreational facilities for the 1,029 permanently assigned officers and the 326 student officers of the Transportation School and other officers on temporary duty—a total of 1,355.

A bathhouse is required to go with the swimming pool in accordance with our sanitary standards. The present mess facilities are located in 2 widely separated temporary buildings totaling 12,868 square feet, which will be demolished. Recreational facilities are practically nonexistent for Army personnel, as I mentioned before, in this area.

NONCOMMISSIONED OFFICERS' OPEN MESS

The next item on page 162 is a noncommissioned officers' mess with swimming pool. The project is required to provide the same sort of

f es for the noncommissioned officers as I cited on the officers' open mess.

As far as the swimming pool is concerned, the only swimming that they do is at Buckroe Beach, which is nearly 25 miles distant, which is the nearest place these people can swim. So we would like to have a swimming pool for them.

REGIMENTAL DISPENSARY

The regimental dispensary on page 163 is required to provide medical services to the military personnel in the permanent troop housing area. No dispensary exists in this area in which we have 4,205 men in permanent barracks. There are 3 temporary dispensaries comprising 6,752 square feet, presently established in temporary troop housing areas, the nearest of which is approximately one-half a mile distant. These buildings will be demolished to provide for the other projects.

BATTALION HEADQUARTERS BUILDINGS

The next item is two battalion headquarters buildings. These are repetitive items throughout the program, and as you will note, on page 164, the total requirement is for 28,358 square feet, and this comprises only 5,156, which is the first increment we have been able to ask for to make up that deficit. These are for troops in permanent barracks.

BRANCH POST EXCHANGE

The next item is the branch post exchange. This project is required to provide facilities for the sale of authorized items for the convenience of 4,032 enlisted men assigned to a regimental area. It is not the same as the main post exchange.

Mr. RILEY. How far is that from the main base?

Colonel SHULER. The regimental area, sir?

Mr. RILEY. Yes. How far away will it be from this?

Colonel SHULER. It is not too far. What we try to do is this. On a post where the strength authorizes it we build a main post exchange for the post, and then in the troop area, because of the time schedule for the enlisted men, and to make it somewhat more convenient for them to buy their cigarettes and authorized items, we try to provide a regimental post exchange in each regimental area, which is considerably smaller than the main post exchange. This calls for $83,000 expenditure. The cost of the main post exchange runs considerably higher than that. It is $340,000. So you see that these are much smaller buildings, $340,000 for the main post exchange as compared to $83,000 for this.

Mr. RILEY. That is the reason I raised the question. You do have a main post exchange and this would be a branch post exchange.

Colonel SHULER. The main post exchange we like to think of as a place where the wives and the eligible children can come in and buy the post exchange merchandise, as well as the officer personnel and the enlisted personnel. They are not excluded. But if you have thousands of troops descending on the main post exchange when they have a limited time to go to the post exchange, it makes the situation such that you cannot operate. We like to give them minimum post ex-

change facilities next to their area so that they can utilize that most of the time.

Mr. MILLER. That is the principle of the corner grocery as compared with the department store.

Colonel SHULER. That is right.

Mr. MILLER. You have local marketing for cigarettes and ice cream and the like.

Colonel SHULER. It does not have nearly the stockage that you have in the main post exchange.

General LAWTON. This is only 4,000 square feet.

Colonel SHULER. Yes. Whereas the other one has an area of 19,918 square feet. So you see, that is five times as big as these branch post exchanges.

BATTALION CLASSROOM BUILDINGS

Colonel SHULER. The next item is five battalion classroom buildings. These are to provide adequate permanent classroom facilities for five battalions in the permanent troop housing area. Each building will be of standard design, 3,500 square feet, and have a seating capacity of 250, and a smaller classroom of 300 square feet for the troop informational and educational activities and other instructional purposes.

Mr. MILLER. Do you have a standard classroom building now, similar to barracks standards?

Colonel SHULER. Yes, sir. This is a standard plan. A great deal of the instruction of the tactical units and technical service units is inside, especially in inclement weather. There is a lot of classroom instruction.

Mr. MILLER. Do you have a standard design for that?

Colonel SHULER. Yes, sir.

Mr. MILLER. And it fits in pretty well no matter what type of unit it is?

Colonel SHULER. That is correct.

STANDARD CONSTRUCTION

Mr. FOSTER. I would like to make one general observation which I think will be helpful to the committee throughout the remainder of this presentation. Where we have large troop concentrations we have not only a standard barracks, but we have a standard battalion and regimental layout. There are certain supporting facilities, such as battalion headquarters, branch post exchanges, battalion classrooms, regimental dispensary, regimental chapels, and so forth. They are all standardized as to design and so sized as to serve a group of barracks roughly of battalion block size. That would account for the numbers of these types of items coming together as they do following a barracks project.

Mr. RILEY. All right.

FAMILY QUARTERS

Colonel SHULER. The last item at Fort Eustis is 250 sets of family quarters. Those are broken down on page 36 into 188 noncommissioned officers, 53 company grade officers, 8 field grade, and 1 general or commanding officer set of quarters.

The total requirement at this station of permanent quarters is 2,635, of which we have 812 assets which leaves us a deficit of 1,823, or 69 percent of the total requirement.

I would like to point out that 92 percent of this request is replacement for inadequate temporary quarters in which people are now living.

Mr. RILEY. Is that mostly mobilization?

Colonel SHULER. Those are two-storied wooden mobilization type converted to family quarters, and that type of quarters.

Mr. RILEY. All right, Colonel Shuler, we can proceed.

NEW ORLEANS ARMY BASE, LA.

Colonel SHULER. The next station is New Orleans Army Base. This includes the New Orleans Port of Embarkation. One item is warehouse for flammables, $117,000.

Page 168 in the detailed justification. Highly flammable materials are presently being stored in a wood frame and sheet-metal building of 7,388 square feet, in open storage area, and on the wharf. We have to construct this building to give us a safe place to store such things as solvents, paints, alcohols, and so forth.

I would like to point out, sir, that here is a warehouse that we are requesting money for at the rate of $10.10 a square foot. The limitation we have on it is $6.

Mr. RILEY. Is this of special construction?

Colonel SHULER. It is a smaller warehouse than usual—considerably smaller—and special construction conditions as to the foundations.

Mr. RILEY. Cannot the Secretary give you a waiver?

Colonel SHULER. He can give us a waiver, but I wanted to point out to the committee it is one of those cases.

OAKLAND ARMY BASE, CALIF.

CARGO TERMINAL FOR THE SAN FRANCISCO PORT OF EMBARKATION

Colonel SHULER. The next one will be the cargo terminal for the San Francisco Port of Embarkation. We are requesting a number of items there, which all add up to $1,923,000. That is on page 169. The items are the extension of utilities in the base motor pool, $35,000; some motor pool facilities in the base motor pool, $55,000; a hardstand in the base motor pool, $99,000; and a vehicle maintenance shop in the base motor pool, $51,000. Then there are a number of post engineer items, such as the administrative building, $79,000; a hardstand, $43,000; a railroad spur and toolhouse, $26,000; heavy equipment shop and vehicle storage shed, $97,000; storehouse, $126,000; utilities, $190,000; and roads and parking area, $55,000; as well as utility shops, $241,000. Then three additional items, namely, an enlisted men's service club with library, $296,000; and a bowling center and craft shop, $159,000; and theater with stage, $371,000.

EXTENSION OF UTILITIES (BASE MOTOR POOL)

The first item, extension of utilities in the base motor pool, together with the next three items, is involved in a condition concerning the real estate which I will describe. This project is required to furnish utility services for a new base motor pool to be located on Government-

owned land. Existing utilities are located on portions of tracts of land leased until June 30, 1957, at an annual rental of $17,106. The present base motor pool is located on what is known as tract 19, city of Oakland in California, at an annual rental of $16,110, and tract I, which is owned by the American Brake Shoe & Foundry Co., and which has a $996 annual rental.

There is a written agreement between the city of Oakland and the United States Government which says that we cannot occupy this land beyond June 30, 1957. We must stay in Oakland Army Base because it is in effect the San Francisco Bay Port of Embarkation. Therefore we are at this time making these requests in order to replace a number of temporary facilities which are on land not owned by the United States, to get them on Government-owned land. It will not require additional real-estate acquisition at this time.

MOTOR POOL FACILITIES (BASE MOTOR POOL)

The next item in the same category is motor pool facilities. That consists of such things as field storage and dispensing facilities. It calls for a total of $55,000. This also is involved in getting off the leased land onto Government land.

HARDSTAND (BASE MOTOR POOL)

The next item on page 172 is a hardstand for the base motor pool. This is needed for the parking of 300 vehicles, and for service aprons for maintenance activities within the motor pool. We are presently meeting the need by using approximately 22,500 square yards of hardstand within the existing base motor pool, which occupies approximately 11 acres of leased tract 19. So we must correct that condition.

VEHICLE MAINTENANCE SHOP (BASE MOTOR POOL)

The next item is on page 173, which is the vehicle maintenance shop in the base motor pool. This item is required to provide a permanent facility for organizational maintenance of 300 administrative and general-purpose vehicles. The organizational maintenance is now being performed in the existing motor pool in modified emergency-type buildings constructed in 1942, which are also utilized for field-maintenance work. These buildings are located on this land which we must vacate by the date of June 1957.

ADMINISTRATION BUILDING (POST ENGINEER)

The next eight items are post engineer type items. The first is an administration building. This is to provide a permanent type of building on Government land for post engineer administrative functions. In this case the present post engineer buildings are located on leased land known as tracts 15 and 19. Tract 15 is 36.7 acres at an annual rental of $1, and tract 19 is 27.194 acres at an annual rental of $16,110. Again they are both owned by the city of Oakland, and we must vacate them by our agreement, the first one on April 27, 1957, and the second one on June 30, 1957.

HARDSTAND (POST ENGINEER)

The next item is a hardstand for the post engineer. This item is required for open storage of road and railroad materials, poles, fender logs, aggregates and other construction materials. The site is in an undeveloped area which will require grading and filling and adequate surfacing to make the area suitable for its intended use.

Three dispersed areas totaling approximately 7,000 square yards are now used. Approximately one-half of existing post engineer hardstand is on leased land scheduled for release in 1957, due to termination of lease. The new area will permit better control and more efficient operations since all open storage will be concentrated in one area. By agreement between the United States Government and the city of Oakland, this lease cannot be extended beyond June 30, 1957.

RAILROAD SPUR AND TOOLHOUSE (POST ENGINEER)

The next item on page 176 is the railroad spur and toolhouse of the post engineer. This project is required to provide access by rail to the warehouse and open storage area of the post engineer.

The new post engineer site is to be located in the same undeveloped area I spoke of just previously. At present rail shipments are continuing to the old site with approximately 475 linear feet of trackage. When the lease expires in 1957 this spur will be removed and relocated in the new area.

HEAVY-EQUIPMENT SHOP AND VEHICLE-STORAGE SHED (POST ENGINEER)

The next item is the heavy-equipment shop and vehicle-storage shed for the post-engineer requirements. This item is required for maintenance and servicing of post-engineer equipment, which is essential to base operations. The existing facilities are located on the same leased land which we must vacate by 1957, and they presently occupy 5,985 square feet of space in 2 modified emergency-type wood-frame buildings constructed in 1942.

STOREHOUSE (POST ENGINEER)

The next item is a storehouse for the post engineer. This storehouse is required for the storage of construction and maintenance materials, equipment and parts. In the interests of safety, a separate structure is provided for the storage of flammables and poisons. Existing storage facilities are widely dispersed and occupy 20,839 square feet of space in modified emergency-type structures, constructed in 1942, which are uneconomical to maintain because of the wood-frame construction and age.

Three buildings are located on land which has to be vacated according to the terms of the lease.

UTILITIES (POST ENGINEER)

The next item on page 179 is utilities, post engineer. This is composed of site preparation and fill; new fence, and relocation of existing fence, including gates and storm drainage items, electrical distribution, gas distribution, sewer distribution and water distribution, making a total of $190,000.

This is to develop this undeveloped area and also has to do with getting on Government property.

ROADS AND PARKING AREA (POST ENGINEER)

The next item is roads and parking area, amounting to $55,000. The site of the new post engineer facilities is on unimproved land with no roads, walks or parking. This item is required to provide an access road to the site, and walks and parking for the particular area.

UTILITY SHOPS (POST ENGINEER)

The next item on page 181 is utility shops, post engineer. This item is required to provide the necessary facilities for plumbers, painters, electricians, carpenters and other artisans employed in the maintenance of buildings, grounds, and utility systems of this installation. The existing shops occupy 15,290 square feet and they occupy all or portions of 7 modified emergency type buildings, uneconomical to maintain due to the wood frame construction and age of the buildings. Five of these are located on the land leased from the city of Oakland which we must vacate.

ENLISTED MEN'S SERVICE CLUB WITH LIBRARY

The next item is an enlisted men's service club with library. This item is required to provide recreation for the enlisted men assigned to the installation, that is, to Oakland Army Base.

The need is now being met by the use of two modified emergency type buildings which, due to the type of construction and age, are uneconomical to maintain. One building was constructed in 1943. It is located on land leased until 1957, and is approximately a quarter mile distant from the center of the permanent barracks area.

The other building used as a service club and a library was constructed in 1942. That is located on Government-owned land.

The modified emergency type buildings constructed in 1942, and to be demolished, consist of a tool shed, 287 square feet; a dispensary, 5,500 square feet; an old tailor shop, 2,550 square feet, and a theater comprising 4,000 square feet.

BOWLING CENTER AND CRAFT SHOP

The next item is the bowling center and craft shop. This item will provide recreation for enlisted men assigned to this installation. The size of the facility requested is the minimum required to provide four lanes for bowling and an authorized craft shop. There is no existing craft shop at this installation. Existing bowling alleys containing 8 lanes are in a modified emergency type building constructed in 1942 and used as a post exchange.

THEATER WITH STAGE

The next item is a theater with stage. The item is required to provide recreation for military personnel assigned to this installation and their dependents, and will replace two modified emergency-type theaters, of wood frame wartime construction, uneconomical to main-

tain. The first building, constructed in 1943, 352 seats, 4,390 square feet, is located on leased land to be vacated by 1957, approximately a quarter of a mile from the center of the permanent barracks area; the other building, constructed in 1942, 357 seats, 3,860 square feet, is located on Government owned land on the site designated fro construction of the enlisted men's service club and library in the 1956 program. Modified emergency-type buildings to be demolished consist of a chapel, 3,700 square feet, and a storehouse, 800 square feet. If new construction is authorized, existing buildings will be disposed of in accordance with regulations in a manner most advantageous to the Government.

Mr. RILEY. Colonel, is this moving picture theater something that can be also used as a stage?

Colonel SHULER. Yes, sir; that is correct.

Mr. RILEY. Will there be any salvage out of these old theaters?

Colonel SHULER. We try to get the maximum salvage out of any demolition jobs. Sometimes we get none and other times a man will bid so many dollars to get the building for what he can get out of it.

Mr. RILEY. This is a movie house as well as a theater with stage?

Colonel SHULER. That is correct, sir.

Mr. RILEY. All right.

FORT STORY (SUBPOST OF FORT EUSTIS), VA.

Colonel SHULER. The next item on page 185 is at Fort Story, which is a subpost of Fort Eustis.

The item is a water storage tank for $41,000. This item is required to meet total fire protection and domestic storage requirements at the installation. The water supply is obtained from the city of Norfolk water system, with 600,000 gallons emergency storage consisting of two 200,000-gallon ground level wooden tanks and a 200,000-gallon permanent-type elevated tank and pumping station.

The two wooden tanks have deteriorated to the extent that they are leaking at the base and have shifted from their original alinement. They will be demolished upon completion of the proposed project, and should be replaced with a safe structure.

MEDICAL CORPS FACILITIES

WILLIAM BEAUMONT ARMY HOSPITAL, TEX.

That takes us to the Medical Corps, which is the last technical service in book 1.

I have with me this afternoon Colonel Adams from the Surgeon's Office, who will assist me if necessary in the testimony.

Page 191, Mr. Chairman, shows that the first station is William Beaumont Army Hospital, which is a permanent station, initially occupied in 1921. The four items requested are additions and alterations to the existing hospital. What it amounts to is that there are 2 parallel buildings and we are making alterations in the 2 parallel buildings and connecting the 2 in the shape of an H. That is the addition of a surgical suite, $209,000; a recovery ward, $73,000; a centralized materiel facility, $129,000; and an X-ray and therapy addition, $175,000, in the total amount of $586,000.

SURGICAL SUITE

Turning to the first justification on page 192, the surgical suite. This is a 1-story addition to one of the existing buildings. The project is required to provide as completely modern and safe an operating suite with ancillary facilities as the available basic structure permits.

In other words, we are putting in additions and alterations on the basic structure. About the same quality of construction as exists there now will go into this permanent structure. The addition will provide six major operating rooms with supporting sterilizing and scrub-up areas and will permit the incorporation of the necessary safety measures.

The existing facility was built in 1921 as part of a 300-bed hospital. The experience in attempting to meet surgical demands of an 1,100-bed hospital indicates that neither sufficient space nor proper layout can be attained within existing facilities to meet requirements. That is the reason for this addition and alteration.

RECOVERY WARD

The next item on page 193 is a recovery ward. This will be a one-story wing between the two buildings that I have described—the two parallel buildings. This is a proposed 16-bed recovery ward to be served by a central oxygen system, and with provisions for segregating male and female patients. It is required to eliminate explosive hazards now present due to the current manner of administering oxygen, and to permit observation of postoperative patients pending sufficient recovery for transfer to the appropriate wards. It also gives us a centrally located nurses station, a utility room, a small nourishment kitchen, necessary toilets and equipment storage, and soiled and clean linen rooms.

The existing facility, as I said before, was built in 1921.

CENTRALIZED MATERIEL FACILITIES

The next item on page 194 is a centralized materiel facility. This project is necessary to permit a centralized materiel section to perform its mission of preparing, maintaining, and issuing sterile and nonsterile supplies and equipment for surgical and OB departments and to meet clinics' needs for all wards. It gives us a centralized facility where the function can be observed at all times, so that the things that must be sterilized and used in operations are not contaminated.

X-RAY AND THERAPY

The next item on page 195 is X-ray and therapy. This is an addition to one of the buildings and an alteration to it. This project is required to provide space for X-ray deep and superficial therapy machines, X-ray darkroom and the necessary supporting equipment.

The existing small dark therapy portions of the X-ray department contain deep and superficial treatment rooms, but simultaneous operation of both rooms is impossible because of the limited space that the operators have. It must be very carefully supervised.

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Brooke Army Medical Center, Texas

The next station is the Brooke Army Medical Center. There is one item at that station. That is the air conditioning of the main hospital costing $549,000.

Mr. Riley. One minute, Colonel.

Off the record.

(Discussion off the record.)

Mr. Riley. On the record.

Colonel Adams. This is the one hospital that serves Fort Bliss.

Colonel Shuler. William Beaumont Army Hospital is the one and only hospital at Fort Bliss serving Fort Bliss and the El Paso area. The Brooke Army Medical Center at Fort Sam Houston is serving that station and San Antonio, Tex.

AIR-CONDITIONING MAIN HOSPITAL BUILDING

This item, Mr. Chairman, of air-conditioning the main hospital has its justification on page 198. Of the existing system of 107 tons capacity provided by several individual units, we are removing 52 tons, and 55 tons serving the operating suite will be retained and connected to the new central system.

Due to extreme and consistent high temperatures, the existing system is not capable of providing a cooling capacity required for this building, which is equipped to house and treat 508 in patients, plus 77 bassinets in the nursery. At times the temperatures recorded inside the building show readings in excess of 95° F., as common occurrences, and temperatures as high as 123° have been reached in the laboratory. We feel that the air conditioning is very necessary for a hospital in this location.

Madigan Army Hospital, Wash.

The next station on page 199, Mr. Chairman, is Madigan Army Hospital, initially occupied in 1929. It has three items: An addition to the dental clinic, $29,000; X-ray therapy and surgical storage additions, $102,000; and a centralized materiel facility, $202,000.

ADDITION TO DENTAL CLINIC

The first item is the addition to the dental clinic. This project is required to permit dental service to perform the mission of providing treatment for hospital inpatients, hospital assigned and attached military personnel, military outpatients from nearby installations, such as ordnance depots, and other installations in the area of Fort Lewis, Wash. These latter places do not have a dental officer present and are unable to carry on with their needs. This request is for a capacity of three chairs to be added on to the present capacity in the dental clinic.

X-RAY THERAPY AND SURGICAL STORAGE ADDITIONS

The next item in this same station is an X-ray therapy and surigal storage addition. This project will provide the following urgently required additions and alterations: 1,190 square feet addition to ad-

join the east side of the present X-ray clinic and the north wall of a connecting corridor, with separate exposure rooms for deep and superficial therapy equipment to permit improved independent treatment and supplemental facilities where we do not now have separate space existing to do this.

Also, 2,240 square feet addition to fill the space between the west side of the X-ray clinic and the north wall of the connection corridor and the east wall of the cross corridor. This will give us room for film storage and viewing rooms to view films, and storage for litters, linen conveyors, anesthetic apparatus, surgical equipment and supplies required to support the surgical pavilion which supplies are now stored in the hallways and constitute a serious fire hazard.

CENTRALIZED MATERIEL FACILITY

This project has the same requirements and the same needs as the one I described before.

Mr. RILEY. This is all at Fort Lewis?

Colonel SHULER. It is near Fort Lewis up the highway toward Tacoma from Fort Lewis, but not on Fort Lewis.

WALTER REED ARMY MEDICAL CENTER, WASHINGTON, D. C.

The last station in the technical service book is Walter Reed Army Medical Center. There are three items. The first is the Army Medical Research Institute, $3,017,000; the second is the addition to the Army Medical Service Graduate School, $4,075,000; and the third is air conditioning of the main buildings, $2,540,000.

ARMY MEDICAL RESEARCH INSTITUTE

On the first item, the Army Medical Research Institute, we are asking for a total of $3,017,000, $2 million of which will be applied against existing authorization. We have requested before the Armed Services Committees for this authorization to be moved from Fort Knox, Ky., where it exists, to combine with new authorizations of $1,017,000, to put this installation at Walter Reed General Hospital.

I will now justify the first item on page 204. The purpose of this project is to consolidate widely spearated research and development and operational activities into one building to permit the undertaking of vital research projects with resultant reduction in space requirements; to minimize overhead for administration as well as service operating costs and provide more efficient utilization of critical and specialized research personnel between the laboratories.

This consolidation concerns a relocation of the following labotatories from their present site to the research and development area of Forest Glen Annex, Md., at Walter Reed General Hospital Medical Center: First, the Army Medical Research Laboratory which is now located at Fort Knox, Ky. Second, the Army Medical Nutrition Laboratory, which is temporarily located at Fitzsimons Army Hospital at Denver, Colo.; and third, the Army Environmental Health Laboratory now located at the Army Chemical Center, Md. Particular emphasis is placed on military environment and reaction to combat stresses. Investigations are conducted as to the adequacy of the soldiers' diet and the nutritional intake. These studies and

experiments assist in the health and nutritional status of troops in all environments, and make sure they are well fed and as healthy and fit as is compatible with combat and military environment. This installation will provide laboratory and field survey and investigational and research support in the field of military environmental health and hygiene.

ADDITION TO ARMY MEDICAL SERVICE GRADUATE SCHOOL

The next item on page 205 is the addition to the Army Medical Service Graduate School. The Army Medical Service Graduate School is responsible for the conduct of the largest and most important inservice part of the research and development program in the medical and basic sciences designed to meet Army requirements. Present facilities, erected in 1933, comprise parent facilities for research and development and graduate medical studies. Eighty thousand square feet of laboratory space, coupled with recent research and development construction at Forest Glen Annex, permit studies employing mainly animals. Additional space immediately adjacent to Walter Reed Hospital facilities is required before new problems requiring pursuit of human studies centered on prevention of diseases, treatment of both battle and mass casualties, definitive studies of mechanisms underlying NP disorders and other treatments and diseases peculiar to military operations can be undertaken.

Mr. RILEY. As I understand it, they simply consolidate certain technical medical and research areas in medicine.

Colonel SHULER. That is correct.

Mr. RILEY. Into one area where they can get it done better.

Colonel SHULER. That is right.

AIR CONDITIONING THE MAIN HOSPITAL

Mr. RILEY. All right.

Colonel SHULER. There is one other item, and we are then finished with the technical services. That is the air conditioning of the main hospital. That is on page 206.

Air conditioning is authorized in nursing units, clinics, laboratories, and areas for treatment and research activities. Portions of buildings have been air conditioned by installation of 61 different systems at Walter Reed, ranging from 3 to 80 tons each, with a total capacity of 992 tons, and by the use of 56 window-type units, with a capacity of 42 tons. The air-handling equipment of the 61 systems will be utilized and other components slavaged.

We expect to save $48,950 a year by centralizing this thing into a modern air-conditioning system and getting rid of a great amount of this old, outdated and variously modeled air-conditioning equipment.

Mr. RILEY. I personally think that is a wise provision. I have had occasion to go to Walter Reed a number of times.

Colonel SHULER. Do you wish to continue, Mr. Chairman?

Mr. RILEY. Yes.

Colonel SHULER. The next book is Book No. 2, the Continental Armies of the United States, the Military Academy, and Armed Forces special weapons projects.

Off the record.

(Discussion off the record.)

First Army Facilities

Fort Devens, Mass.

Colonel Shuler. The first station, Mr. Chairman, is in the First Army at Fort Devens, Mass. We are requesting at Fort Devens, Mr. Chairman, funds to finance 2 battalion headquarters buildings, $91,000, and 3 enlisted men's barracks with messes, $1,803,000. These are the normal 326-man standard barracks. Also the money for 400 sets of family quarters costing $5,381,000.

FAMILY QUARTERS

Taking up the family quarters first, 300 of them are for noncommissioned officers, and 90 in company grade. I am on page 40, Mr. Chairman. Ten are in field grade. We have a total requirement of 2,182 and have assets of 313, of which 202 are Wherry housing, which leaves a deficiency of 1,869.

I would like to state that 98 percent of this request is for replacement of inadequate temporary quarters now occupied at Fort Devens.

BATTALION HEADQUARTERS BUILDINGS

The next item is for two battalion headquarters buildings. This project is required to provide administrative command and supply facilities for approximately 7,504 enlisted men to be housed in 5 new barracks. Two of these are in the fiscal year 1955 execution program and three are the three barracks we are requesting in this program. We have no similar facilities now existing, as the new permanent barracks are to be located in a newly developed area.

ENLISTED MEN'S BARRACKS

The other item is for 3 enlisted men's barracks, standard 326-man barracks, which will give us 978 more permanent barracks spaces to add to the 750 we have. This will alleviate only a portion of the deficiency which exists in our goal of 6,747 permanent spaces.

The proposed barracks are required to provide additional permanent housing for 978 enlisted men in the permanent barracks area. The need is now being met by utilization of mobilization-type 63-man barracks which were built in 1941 and, while they are structurally in good condition, they do not provide accommodations comparable to those provided in permanent barracks. To provide space for these new barracks, it will be necessary to demolish 21 temporary buildings (twelve 63-man barracks, 2 dayrooms, 2,288 square feet), 4 messes, 9,648 square feet; 2,592 square feet of administration and storage; 1,676 square feet of guardhouse and 3,749 square feet of recreation building). Demolition of these 21 buildings will not affect mobilization requirements, and it is estimated that relocation and provision of utilities if accomplished would cost approximately $452,000.

Fort Dix, N. J.

Next is Fort Dix. The items at Fort Dix are 400 sets of family quarters, $5,495,000; 2 branch post exchanges, $166,000; an enlisted

men's service club, $489,000; a dental clinic, $324,000; 2 regimental dispensaries, $239,000; 2 battalion headquarters buildings, $101,000; a main post exchange with cafeterias, $615,000; and a fieldhouse, $1,357,000.

FAMILY QUARTERS

Mr. RILEY. On your family housing, I note that 800 out of the 833 units you propose to keep are Wherry.

Colonel SHULER. That is correct.

Mr. RILEY. The addition of these 400 units that are to be built with direct appropriations will not affect the use of the presently existing Wherry housing; will they?

Colonel SHULER. They will not affect the use of the presently existing Wherry for this reason: 292 of the requested houses are for noncommissioned officers, and 98 are for company grade, which is practically 99 percent of the request. Those are the people in the Army who cannot afford to rent Wherry housing. They are on a quarters allowance which is well below the rental price of the Wherry housing.

BRANCH POST EXCHANGES

The project is required to provide exchange facilities for approximately 6,500 basic trainees occupying 27 new barracks constructed during 1953. Need is now being met by troops utilizing branch exchanges in other troop areas located 2½ miles away. Basic trainees are under rigid and tight training schedules and normally not allowed to leave their company area. No buildings exist in the new barrack area which can be converted or used for post exchange activities.

ENLISTED MEN'S SERVICE CLUB

This project is required to provide recreation for approximately 6,500 troops occupying 27 new permanent barracks. The need is presently being met by troops utilizing 4 mobilization-type clubs (44,484 square feet) in other troop areas, 1 to 2½ miles away. Troops to be served are primarily basic trainees who are under rigid and tight training schedules and normally not allowed to leave their company area. Deletion or deferral of this project could, due to morale effects which can result in decreased interest and cooperation, jeopardize the effective accomplishment of training programs.

DENTAL CLINIC

This project is required to provide dental service for approximately 6,500 troops occupying 27 new permanent barracks recently completed. The need is now being met by utilizing 5 mobilization-type dental facilities of 20,933 square feet built in 1940 and located up to 4 miles from the new barracks. Existing buildings will be retained for mobilization use or until such time as postwar construction requirements necessitate their removal.

REGIMENTAL DISPENSARIES

This project is required to provide medical treatment for approximately 6,500 troops occupying 27 new permanent barracks recently completed. These troops are now served by a dispensary with limited

facilities which occupies 2,000 square feet in the 17,000 square feet permanent building No. 110. The space utilized is urgently needed to permit expansion of other activities which are located in the remainder of the building. The 7 other existing dispensaries are located in converted temporary buildings up to 3 miles away from the permanent troop housing area, and are required to serve troops in their respective areas.

BATTALION HEADQUARTERS BUILDINGS

This project is required to provide administrative, supply, and command facilities for 6,500 enlisted men assigned to 27 new permanent-type 263-man barracks recently completed. Six permanent battalion headquarters buildings are included in the fiscal year 1955 MCA execution program. This project will complete requirements for this type of facility in this area. The need is presently being met by utilizing urgently needed troop space in one of the new barracks.

MAIN POST EXCHANGE

The main post exchange with cafeterias is on page 217. This project is required to provide a permanent post exchange where assigned military personnel and their dependents may conveniently purchase necessary nonissue merchandise. Proposed facility will replace an existing post exchange which occupies a 7,604-square-foot World War II mobilization-type building. The area of the present building does not meet established minimum criteria for this type of facility and, in addition, the foundation has deteriorated to the extent that the floor is unsafe and any attempt to repair the foundation columns would require complete rehabilitation. The need for a permanent type post exchange at this installation cannot be overemphasized.

The only other thing I can say, Mr. Chairman, is that this request as we make it of this committee this year is fully as good and fully as important as any other post exchange we have requested at any station comparable to Fort Dix. It is in accordance with our criteria and our Army regulation 415–31. I cannot add anything else to our justification. We feel it is very necessary to get this, because if we do not, we have a deteriorated building which is inadequate from the standpoint of space.

Mr. RILEY. Do I infer from this also that it might constitute a hazard if you had a good many people in there at one time?

Colonel SHULER. That is right. The foundations are so weakened that it would be a hazard if we had too many people in it at one time.

Mr. RILEY. All right. The fieldhouse is next.

FIELDHOUSE

Colonel SHULER. On the fieldhouse, this project is required for the physical training and recreation of assigned military personnel. Existing facility—a sports arena—does not provide the established minimum space criteria and is not adaptable for maintaining a physical-training program on schedule, especially during a period of inclement weather.

We are allowed at any post in excess of 7,000 men under the permanent peacetime Army to have a fieldhouse. Below that strength level we build regimental gymnasiums. Just as we would ask for a fieldhouse for any other post we feel we need it here.

I have no other justification than that.

Mr. RILEY. You do not have one there now?

Colonel SHULER. We do not have anything there but the sports arena, which is wide open and does not provide us with our facilities.

Mr. RILEY. The weather there is such that you should have an enclosure if you are going to use it the year around.

Colonel SHULER. That is right. We would like a gymnasium, and basketball floor, and so forth, enclosed.

Mr. RILEY. All right.

FORT JAY, N. Y.

Colonel SHULER. The next is Fort Jay on Governors Island, N. Y. We are asking for 1 item, which concerns 3 ferry slips for $731,000. This project is required to enlarge the Fort Jay 20-ton Soisson slip, and the Battery, New York, 20-ton slip to meet requirements of 2 new ferries, 1 scheduled for delivery on July 1, 1955 and the other on September 1, 1955. In addition, it is necessary that a new Fort Jay 20-ton San Juan slip be located adjacent to the Soisson slip in order to eliminate the hazardous and difficult approach to the existing San Juan slip, especially in foggy and stormy weather, resulting from the proximity, 200 feet offshore, of the Brooklyn-Battery Tunnel ventilation shaft. To insure uninterrupted ferry service of an average of 870 trips per week it is essential that 2 slips be provided on Governors Island to have an alternate slip available when either slip is undergoing maintenance and repair. The present San Juan slip, built prior to 1913, has a 10-ton load limit which does not meet present-day traffic demands, a hand hoist for securing the ferry to the bridge, no pedestrian walkways, and, during the past year, the bridge decking has failed due to heavy loads.

This is bringing the ferry slips up to accommodate two modern ferries that we are putting in there and to have this alternate slip which will be utilized in case something happens to one of the other ones.

Mr. RILEY. Fort Jay can only be reached by ferry. Is that right? You have to go across water to reach it?

Colonel SHULER. That is correct, sir.

Mr. RILEY. All right.

FORT NIAGARA, N. Y.

Colonel SHULER. The next item is at Fort Niagara, N. Y., a station which was initially occupied in 1840. This is one of the few temporary stations in this bill, Mr. Chairman. It is 1 of about 4 temporary stations.

This will be emergency-type buildings, 2 general-purpose warehouses costing $209,000. This is a Nike support mission and to support antiaircraft units and other assigned activities. The justification is that no warehouse exists at Fort Niagara, and this project is required to provide space for the consolidated property storage which, since February 1, 1953, the date of occupancy by the present activity, has been located at Model City, N. Y., 8 miles distant, in three 9,600

square foot T/O-type buildings constructed about 1942 without sanitary of fire-protection facilities. The nearest source of water supply is a fire hydrant 1 mile away, and the nearest toilet facilities, other than a pit latrine, are 2 miles distant. Thirty-four military and civilian personnel, including ten females, are required to operate the activity. The proposed warehouses will eliminate the need for 11 military personnel, assigned to the present warehouses, to travel back and forth between Fort Niagara and Model City for messing and housing. In addition, the six military personnel on guard duty after working hours will not be needed. Upon completion of the proposed project, approximately $140,000, which is the estimated cost of rehabilitating and repairing the existing structures, will be saved the first year, plus $10,000 per year for transportation and security guards.

Mr. RILEY. All right.

FORT TOTTEN, N. Y.

Colonel SHULER. The next item is Fort Totten, N. Y., at page 223.

The requests are for the extension of the sewer system, $82,000, and modification of the electrical distribution system, $88,000. Briefly, it is to correct deficiencies in an old, outmoded utility system that dates back to 1857. The mission of the post is the support of the Nike and anitaircraft units stationed at Fort Totten, Fort Tilden, Camp Hero, and other stations in that area.

EXTENSION OF THE SEWER SYSTEM

The project is required to provide sewage treatment by utilization of the New York City sewer system, and thereby permit discontinuance of operation of the installation's sewage treatment plant with its outfall adjacent to a park department bathing beach and objected to by the United States Public Health Service and the New York City health authorities. The existing plant and equipment, predating 1941, are in poor condition; $13,000 was spent in fiscal year 1953 to repair leaking, trickling filter-bed walls and the digester dome and, while these repairs corrected conditions temporarily, it is evdient that major repairs and replacement of equipment will be necessary in the near future. It is estimated that 50 million gallons of sewage will be treated and disposed of through the proposed connection at a cost of $10,000 per year, resulting in an estimated saving of $30,000 per year. Upon completion of the proposed connection, the outfall sewer will be removed at an estimated cost of $2,000 and the existing plant salvaged.

MODIFICATION OF ELECTRICAL DISTRIBUTION SYSTEM

The project is required to eliminate the existing overload on primary lines. The present underground distribution system is arranged in the form of a loop feeder without emergency tie switch at the center point of the two feeders. In spite of the subsequent installation of an additional 600 kilovolt-ampere transformer capacity, one feeder is too small to carry its present load and 5 failures in 5 months, July to November 1954, have occurred, resulting in more than 50 percent of the post being without electric service and costing $1,500 for mate-

rials and labor, or 30 man-days. In addition, low-voltage condition has caused 20 motors of various ratings to burn out, costing an average of $75 each to repair. Switchgears and other equipment in the switchhouse are obsolete and repair parts are unobtainable.

Second Army Facilities

Fort Holabird, Md.

Now we come to Fort Holabird in the Second Army, page 227, Mr. Chairman. This, sir, is another standard barracks costing $612,000.

The project is required to provide permanent type housing for troops assigned to this installation. Troops are now housed in 14 mobilization-type barracks, 63-man, which were built in 1941. Buildings have deteriorated to the extent that economical maintenance is no longer possible. In fiscal 1954 the cost of maintenance was approximately $86,000. Construction will permit consolidation of some of enlisted personnel now dispersed throughout the installation. In view of the condition of the existing barracks, and the fact that they lack living facilities for maintaining highest morale desired at installation, need for the project cannot be overemphasized. These substandard barracks are detrimental to the installation and will be demolished to permit siting of this project.

Fort Knox, Ky.

The next station is Fort Knox, which is one of our very important stations and occupied since 1918. First of all, we are requesting $4,837,000 to fund 360 family quarters broken down into 270 noncommissioned officers, 82 company grade and 8 field grade. The total requirement at Fort Knox is 3,615, and the assets are now 2,122, of which 1,700 are Wherry, which leaves a deficiency of 1,493.

I think it is important to note, Mr. Chairman, that 98 percent of this request is to replace inadequate temporary quarters now occupied by people entitled to adequate quarters.

The remaining items are a BOQ for nurses, $520,000; an addition to the officers' open mess with swimming pool, $478,000; a hardstand in the regimental motor park, $125,000; four battalion oil and grease buildings, $6,000; gasoline stations, $51,000; addition to the cold storage plant, $98,000; a communications school building in connection with the Armored School $771,000; five battalion classroom buildings, $261,000; three battalion headquarters buildings, $148,000; three regimental dispensaries, $315,000; two branch post exchanges, $137,000; and two enlisted men's barracks, $1,243,000. The justifications for these items are as follows:

BACHELOR OFFICERS' QUARTERS (NURSES)

The project is required to provide permanent housing for nurses to be assigned to permanent hospital now under construction. Nurses are housed in mobilization-type barracks, constructed in 1941 and located 1.3 miles from this new hospital with the exception of one building of 10 spaces near the old permanent hospital of 127 beds. Construction will not require removal of existing structures. Mobil-

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ization-type buildings will be retained for civilian component summer training, interim and mobilization purposes. Deletion of this project will make it necessary for the nurses to continue living in substandard-type quarters, a distance of 1.3 miles from the hospital. In addition, it would affect the recruitment program for officer and civilian nurses at this station. Further, it will be necessary to maintain bus service and a standby vehicle on 24-hour basis for emergency calls.

ADDITION TO OFFICERS' OPEN MESS WITH SWIMMING POOL

The existing permanent officers' mess was constructed in 1934 as a regimental type. Due to limited size, this facility is not used as an open mess and has little value as such until expanded to meet requirements for the authorized permanent strength. This addition will provide a gross area to meet the installation requirements at less cost than construction of a complete new facility. Until recent date a large temporary building located near the permanent structure has been used as open mess. Due to structural failure, resulting from age and type of construction, this building has been condemned and disposed of in accordance with current regulations. This addition will provide a consolidated open mess with capacity to serve all bachelor officers, including students of the Armored School and transients. A bathhouse is required to comply with TB Med. 163—Sanitary control of Army swimming pools.

HARDSTAND (REGIMENTAL MOTOR PARK)

The project is required to provide a hard-surfaced parking area for organizational tracklaying vehicles, and for performance of miscellaneous minor repairs and servicing, as may be permitted during favorable weather. No such parking area is in this motor park. Existing areas for parking and servicing are very dusty or muddy during inclement weather, increasing maintenance cost. To increase usefulness of this area and decrease maintenance, stone has been used for the past few years to provide proper wearing surface. This has not proven satisfactory. The cost of this improvement has already exceeded estimated cost of the project. Requirement is for 1,491 track laying vehicles. After project is completed, some of the existing stone surfaced areas will be retained for use by Reserve units during summer training. Deletion of this project will result in continuous high maintenance cost of this equipment, loss of operating time, and decrease in its life.

BATTALION OIL AND GREASE BUILDINGS

The buildings are required to provide storage for oil and grease for existing permanent motor shops. Existing buildings are emergency type shacks, moved from land acquired in 1941 and 1942, or constructed from salvaged materials. The buildings are a fire hazard; 50 percent of oils and greases drawn for daily motor park use are stored in the open, subject to deterioration. Oils and greases are necessary in motor parks to service 1,491 tracklaying vehicles and 3,093 wheel vehicles not including administrative vehicles. The existing temporary structures will be salvaged. Elimination of this

project will continue a fire hazard and prevent compliance with safety regulations for storage of flammable items.

GASOLINE STATIONS

They are required to provide gasoline dispensing facilities for two regimental motor parks. Approximately 200 to 250 tracklaying type vehicles are stored and serviced in each park. Daily gasoline requirements for one filling of vehicles on each park, based on two-thirds vehicle capacity, is approximately 30,000 gallons. At present, gasoline is being supplied by use of Godman Field fueling system and trucking to parks, and by moving tanks 1¼ miles through the installation to existing facilities. Cost of moving vehicles 2½ miles daily, including wear to vehicles and roads, will amortize cost of dispensing systems located in parks within a period of 1 year. These facilities are necessary for both interim and peacetime operation. Existing gas dispensing systems are necessary and will be continued in use to use to service wheel vehicles, both general purpose and administrative.

ADDITION AND MODIFICATION TO COLD STORAGE PLANT

The project is required to provide refrigerated storage space to meet peacetime operation requirement. Presently, 8 prefabricated boxes, totaling 2,208 square feet, are being used to supplement the existing permanent facility. Cold storage operations are seriously handicapped by lack of space for balanced storage and efficient receiving, breakdown and issue of perishable subsistence. Refrigerated air lock space (between platform and cold storage rooms) to be provided in proposed addition will result in more efficient and economical cold storage operations.

COMMUNICATIONS SCHOOL BUILDING (ARMORED SCHOOL)

The next item is the Communications School Building in the Armored School. At present the communications department of the Armored School is located in a temporary two-storied barracks type building. The classrooms and training aids are entirely inadequate. The supporting posts in the building, together with the low ceilings, preclude economical alterations that would provide satisfactory temporary requirements. Due to the lack of acoustic treatment and the partition walls, between the first floor ceiling and the second floor, it is impossible to conduct a high standard of instruction for more than one class at one time in the building. Visual instruction is limited because of the poles and it prohibits a portion of the students from the use of blackboard charts.

The cost of modernizing these buildings for the use of the latest type of equipment cannot be justified. This project is designed for the efficient and controlled instruction of 360 students on a peacetime basis and it will be designed to meet the minimum requirements for classrooms, laboratories, and administrative space, including instructors' offices and supply and storage space, as well as rectifier and heater rooms.

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We consider this a very important request because of the importance of the training at the Armored School, and especially in the communications portion of the training.

Mr. RILEY. That has gotten to be a pretty technical training course too, has it not?

Colonel SHULER. Yes, sir. It is very technical, dealing with electronics and radio, and so forth.

BATTALION CLASSROOM BUILDINGS

Prior construction at this installation included barracks for 8,385 enlisted men which will be completed during fiscal year 1955. Classrooms were not provided for six of the battalion areas where a part of this housing will be located. Current training programs include classroom study in addition to field training. At the present time, mobilization type barracks are being used as classrooms. However, low ceilings prevent the use of raised platforms, and columns obstruct the view of the students. These buildings will revert to troop housing when these classrooms are completed. Due to conditions of available space for classroom use, all classes are held outdoors when weather permits. Construction will require relocation of one temporary building. Messes, now used as classrooms, will be modified for their original designed use.

BATTALION HEADQUARTERS BUILDINGS

The project is required for the administrative, supply, and command functions of troops in battalion areas and assigned to permanent barracks recently completed. Currently, these functions are being accomplished in barracks space which is urgently needed for troop housing. No buildings, either permanent or temporary, are available adjacent to housing area which could be converted for battalion administration. Construction will require the demolition of four temporary buildings constructed in 1918. These temporary buildings are in very poor condition and will require removal, regardless of new construction.

REGIMENTAL DISPENSARIES

This project is required to provide medical treatment for troops assigned to new permanent barracks in three regimental areas. The existing dispensaries are located in 16 mobilization-type structures with a total area of 36,544 square feet. Some of these structures have deteriorated beyond economical repair; others are structurally sound and will be retained. Approximately 15 vehicles are required daily to transport patients from existing permanent troop housing to the temporary dispensaries.

BRANCH POST EXCHANGES

The project is required to permit military personnel assigned to the new permanent barracks which were constructed in battalion areas to purchase necessary merchandise without inconvenience. Existing facilities are located in 15 temporary structures totaling 57,323 square feet and 1 permanent building of 4,878 square feet. The temporary structures are in fair condition except buildings Nos.

1946 and 5045. These two buildings will be demolished after they have been replaced. The nearest existing PX is approximately three-quarters of a mile from the new battalion areas. The training schedules for these troops do not permit utilization of PX facilities in other areas because of distances. Deletion of this project will certainly have an adverse effect on the morale of the troops assigned to this area. Most of the existing PX's will be retained to serve the troops in areas in which they are located, or will be retained for mobilization requirements.

ENLISTED MEN'S BARRACKS

The project is required to provide permanent housing for 652 assigned enlisted personnel. The troops are now occupying mobilization type barracks completed in 1941. Existing buildings will be retained for interim use and for housing civilian components during summer training periods. Deletion of this project would require troops to continue living in substandard housing and, with other troops living in immediately adjacent permanent barracks, would result in a serious morale problem.

FORT GEORGE G. MEADE, MD.

The next station is Fort George G. Meade in Maryland. Our request is for a total of $923,000 to fund clothing and equipment repair shop, $189,000; motor park facilities in the regimental motor park, $71,000; a hardstand in the regimental motor park, $127,000; three battalion classroom buildings, $164,000; a regimental dispensary $127,000; a branch post exchange, $68,000; and a regimental chapel, $177,000.

CLOTHING AND EQUIPMENT REPAIR SHOP

The project is required to replace the clothing and equipment repair shop destroyed by fire in April 1951. It will provide space for all shop facilities for repair of clothing, shoes, tentage, typewriters, office machines, furniture, etc. Existing repair facilities are in five dispersed temporary type warehouses, built in 1918, and a quonset hut located from 20 to 800 feet distant. These structures, 168 by 60 feet, 168 by 60 feet, 120 by 120 feet, 20 by 44 feet, 168 by 60 feet, respectively, lack sufficient working space and facilities to process present workload. Location of these buildings prevents proper supervision and control and increases the cost of operation by $25,000 a year. The gross monetary of the operations conducted in the C. and E. shop total $225,360. The four warehouses now used will be converted into temporary storage. The quonset hut will be dismantled. If this project is not approved in the near future, 6,600 square feet of additional space in buildings 500 feet to 800 feet from the present C. and E. activities must be provided to accomplish the present workload.

MOTOR PARK FACILITIES

This project is required to complete facilities for a regimental motor park to permit complete servicing of 500 assigned organizational vehicles. The shop was authorized and funded in a previous program. Utilization by the 3d Cavalry Regiment is expected upon completion

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of these facilities. Existing facilities which must be utilized to service these vehicles in the event this item is deleted are located approximately 1 mile from this area.

HARDSTAND (MOTOR PARK)

The hardstand is required to provide a hard-surfaced parking area for vehicles awaiting repairs and for performance of miscellaneous minor repairs and servicing as may be permitted if the weather is favorable. This particular motor park includes a shop only which was authorized and funded in a prior year program. It is expected that this motor park will be utilized by the 3d Cavalry Regiment when completed. Existing parking facilities for this unit are not hard surfaced. In addition, they are located in widely dispersed areas.

BATTALION CLASSROOM BUILDINGS

The project is required for indoor training and instructions for troops assigned to the new permanent barracks which were recently completed in three battalion areas. No classrooms were included with other supporting facilities completed at the same time. The current training programs include indoor study as well as field training. Existing buildings used for classrooms are mobilization type completed in 1941. These structures were originally designed as messes and are located 2 to 3 miles from the battalion area. These temporary facilities will be retained for Reserve training and for mobilization requirements. Deletion of this project will adversely affect the scheduled training of the unit housed in this area.

REGIMENTAL DISPENSARY

This project is required to provide medical treatment for military personnel assigned to regimental areas. No dispensaries exist. Personnel must be transported to the hospital or temporary infirmaries located approximately 2 to 3 miles from the area. Deletion of the project will result in approximately 15 trips each day to transport patients requiring medical treatment for sickness or injury.

BRANCH POST EXCHANGE

This project is required to provide necessary post exchange facilities for military personnel who will be assigned to the new permanent barracks in the regimental areas to be occupied by the 3d Cavalry Regiment. Existing temporary post exchange (2,331 square feet) will be utilized by troops in temporary barracks area upon completion of this project.

REGIMENTAL CHAPEL

The project is required to provide facilities for religious worship by all military personnel assigned to the new permanent barracks in the regimental area to be occupied by the 3d Cavalry Regiment. This chapel will be used for Protestant, Catholic, and Jewish services and other religious activities at various times. Existing 12 modified emergency chapels will be retained for use of troops housed in the temporary barracks area. Two of these chapels with 300 seats each

are located in this vicinity, but cannot accommodate troops in the new area in addition to the troops now being served.

Third Army Facilities

Fort Benning, Ga.

The next station, Mr. Chairman, is at page 251 of the big book and 46 of the family quarters book, Fort Benning, Ga., the home of the Infantry and one of our most important stations. 150 sets of family quarters costing $1,979,000 are broken down as 120 commissioned officers and 30 company grade officers. The total requirements are 6,627. We have 1,935 assets, of which 1,000 are Wherry. The deficiency is for 4,692. The remainder of the items at Fort Benning are 3 regimental dispensaries, $299,000; 3 battalion headquarters buildings, $115,000; 3 motor-repair shops, $184,000; a theater without stage, $359,000; 2 branch post exchanges, $137,000; 10 battalion classroom buildings, $466,000; 2 motor-repair shops, $124,000; motor-park facilities, $61,000; a hardstand for the motor park, $134,000; enlisted men's barracks, $460,000; an administration building, $13,000; a storeroom, $21,000; a warehouse, $98,000; bachelor officers' quarters, $167,000; a classroom building, $30,000; and 9 enlisted men's barracks, $5,745,000.

Mr. Riley. Why is this barracks of 263 instead of the 326-space barracks?

Colonel Shuler. Mr. Riley, in some cases where the barracks area needs one barracks to finish out the area we allowed them to build one 263-man barracks. In other places where the type and terrain is rough we might use a 263-man barracks instead of a 326. The cases are isolated.

Mr. Foster. In this instance this particular barracks is requested to replace one that was destroyed by the tornado that hit Fort Benning last year.

General Lawton. You notice it states in the justification the space limitation for the construction of the larger barracks.

Mr. Riley. I think it ought to be noted that this is a replacement and there was not available space there for more than that size.

Colonel Shuler. The reason why I said what I did is there are a few permanent barracks in the program of the 263 standard, for the reason that I cited to the chairman. It would not be wise where you had one 263-man barracks left to go in an area, to try to put a 326-man barracks in. That is the reason why we request the 263 capacity type in few cases.

Mr. Riley. All right.

REGIMENTAL DISPENSARIES

This project is required to provide medical facilities for 7,712 enlisted men and students assigned to permanent barracks in the north and south areas, completed June 1954, and 2,104 enlisted men to be assigned to barracks now under construction in the Kelley Hill area. These are new areas, and no such facilities exist. A temporary building near the north area, 25 feet by 92 feet, or 2,300 square feet, is being utilized to serve 60 to 80 persons who require medical treatment each day from the north and south areas. A shuttle truck is

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used to transport troops 1 mile from the south area, from 0705 to 1500 hours daily. When construction of barracks is completed at Kelley Hill area, 3 miles away, there will be 20 to 40 persons who will have to be transported each day or it will be necessary to use 1,000 square feet of new troop housing for medical treatment.

BATTALION HEADQUARTERS BUILDINGS

This project is required to provide facilities for administration, command, and supply functions for troops assigned to new permanent barracks in the new north area, completed June 1954, and troops to be assigned to permanent barracks now under construction in the new Kelley Hill area. A temporary building is now being used for the north area and the need will not exist in the Kelley Hill area until completion of the new barracks. There are no buildings in the new areas that could be used for this purpose. Deferral of this project will require that troop space in the new barracks be utilized for these functions.

MOTOR-REPAIR SHOPS

This project is required to supplement one permanent motor-repair shop in the motor park in the recently completed north area of the installation. It will provide normal operational facilities for repair of vehicles to be assigned to troop units occupying the 3,504 spaces in the permanent barracks. In addition to the 1 existing permanent shop there are 2 temporary buildings of 3,108 square feet each that afford shelter for some vehicle-repair operations. However, they are mere shells, lacking in such essentials as hydraulic lifts and chain hoists. The additional repair shops are basic elements needed to fully develop the motor park. The nearby barracks have 3,504 spaces for a unit of regimental size which would normally have approximately 415 vehicles assigned. If this project is eliminated it will not be possible to service such a large number of vehicles without defeating the training responsibilities applicable to vehicle maintenance.

THEATER WITHOUT STAGE

This project is required to provide recreation and training for approximately 7,700 enlisted men housed in the new permanent barracks completed in June 1954. There is no theater readily accessible to this area. Aside from providing recreation, this theater will be used for showing training films and other instruction where large battalion-size groups are involved. At the present time such gatherings are not feasible. If this project is eliminated, the troops residing in the new housing areas will continue to be deprived of allowable recreational facilities.

BRANCH POST EXCHANGES

This project is required to provide exchange facilities for 6,312 enlisted men to be assigned to barracks now completed or under construction in the Kelley Hill and south areas. Facilities will permit enlisted men and their dependents to purchase essential merchandise without inconvenience. No such facilities exist in these two new areas. The nearest temporary exchanges are located from 1¾ to 3

miles away. Barrack space will be utilized temporarily as post exchanges until completion of the new facilities.

BATTALION CLASSROOM BUILDINGS

This project is required for classroom training and instructions for 8 infantry battalions for which certain facilities were completed in June 1954 and eight 263-man barracks funded in fiscal year 1955 MCA program. This construction is in the Kelley Hill area. Two training programs per day and a night officer and NCO training program must be accomplished in addition to normal T. I. and E. and character guidance programs. There are no classrooms of this size in existence in areas specified and permanent troop spaces are currently used as temporary classrooms. Instruction is interrupted constantly by normal barracks traffic and the lack of facilities for showing training films. Need for classrooms on Kelley Hill will not develop until the eight 263-man barracks are completed. When troop space is no longer needed for classroom use it will be returned for its designed purpose. Elimination of this project will result in the continuation of the present unsatisfactory classroom conditions and deficiencies in indoor training.

MOTOR REPAIR SHOPS

These shops are required to provide facilities for repair of motor vehicles, trailers, et cetera, assigned to troop units who will occupy the eight 263-man barracks funded in fiscal year 1955 for the Kelley Hill area. The need for these shops will not develop until the barracks are completed and occupied, but the need for them at that time will be urgent. The Kelley Hill area is an entirely new development and is approximately 3 miles from any existing housing area. The above-mentioned barracks are the only buildings funded to date for construction at this site, and, if these shops are eliminated from the program, repair and maintenance would have to be done in the open, under tents, or at some remote temporary type shop, since all permanent shops in other areas are in active use.

MOTOR PARK FACILITIES

These motor park facilities are required for first echelon maintenance, repair, and operation of 500 motor vehicles assigned to various troop units occupying permanent housing recently completed, or under construction, in the Kelley Hill area. One oil storage building and 8 wash racks are needed in each of the 2 new regimental motor parks on the main post, the former to provide additional space required for normal oil storage, and the latter to eliminate necessity for washing vehicles after duty hours because there are only 4 wash platforms in each park to service more than 500 vehicles. The need for these facilities at Kelley Hill will not materialize until the barracks now under construction are completed and occupied. This site is an entirely new development approximately 3 miles from any existing motor park. Elimination of this project will impose a severe handicap on personnel responsible for maintenance, operation, and accountability of motor vehicles and accessories.

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HARDSTAND (MOTOR PARK)

This hardstand is required to provide a stabilized all-weather surface for parking and servicing motor vehicles, trailers, and other equipment that will be assigned to troop units to be assigned to the eight 263-man permanent barracks funded in fiscal year 1955 and planned for construction in Kelley Hill area. The need for this item will not materialize until these barracks are completed and occupied, but the need at that time will be urgent. Kelley Hill is an entirely new development approximately 3 miles from any existing housing and supporting facilities of all types must be provided. If this project is eliminated it will be practically impossible for troops in the new barracks to maintain their vehicles in an acceptable manner. The soil in the vicinity varies from silty fine sand to clay, which unless stabilized and paved, will require continuous maintenance for use as a motor park.

ENLISTED MEN'S BARRACKS

This project is required to replace seven 70-man and two 63-man temporary barracks that were destroyed by windstorm on March 13, 1954. The temporary buildings had a capacity of 616 spaces. They were in three widely separated areas. Site of construction is adjacent to recently completed 263-man barracks in the south area. Space limitations prevent construction of larger 326-man barracks. Deferment of this project will result in continued deficiency of a part of the troop housing urgently needed at this installation.

ADMINISTRATION BUILDING

This building is required to replace one temporary building No. 2588 which was demolished by windstorm on March 13, 1954. The former building was used by instructors of the Airborne Department of the Infantry School for performance of administrative and training functions during the first week of the course of instruction for prospective airborne troops. The former building was of the same size and had the facilities needed for the assigned mission. This building is to be similar in characteristics to the original.

STOREROOM (ADDITION TO OFFICERS' MESS)

It is required to provide storage space for food and nonedible items used in the operation of the officers' mess, building No. 229, serving 600 to 800 persons per day, replacing 3,375 square feet of floor space previously available in temporary building No. 1455, which was destroyed by windstorm on March 13, 1954. Since the storm, one temporary-type mess hall and the kitchen of a double mess, are used for storage of the food and supplies. These buildings are 1,000 feet and 1 mile, respectively, away from the mess. The division of stores entails double handling, additional recordkeeping and transportation. These adverse conditions would be eliminated when the addition is constructed.

WAREHOUSE WITH RAILROAD SPUR

This building is required to replace storage space totaling 9,838 square feet which was available in temporary buildings Nos. 1261, 1748, and 1839 prior to their destruction by windstorm on March 13,

1954. These buildings were adjacent to the Ordnance permanent armament repair shop and warehouse on the main post, and were used for temporary storage of articles prior to repair and reissue, and for overflow items from the permanent warehouse. Since the destruction of these buildings it has been necessary to store the more critical items in aisles and other available space within the two permanent buildings. Other items are kept in nearby open storage or in temporary buildings in the fenced ordnance yard at Sand Hill, which is 7 miles by road from the main post facilities. Such scattered operations make it difficult to maintain stock records, require undue travel, and generally impair efficiency.

BACHELOR OFFICERS' QUARTERS

This building is required to partially relieve the shortage of bachelor quarters for single and transient officers. This building will replace three temporary type hospital wards containing 11,586 square feet which had been used for housing such transient groups as USMA classes, JCOC personnel, Army inspection teams, and USAR units, but were destroyed by a windstorm on March 13, 1954. These quarters were used because of the shortage of permanent BOQ spaces. Since the storm these officers are utilizing space in a temporary enlisted men's barracks.

CLASSROOM BUILDING

This classroom is intended as a replacement for building No. 2413 which was destroyed by windstorm on March 13, 1954. Building No. 2413 was located on the flight line at Lawson Army Air Field and was being used by the Airborne Department for parachute training. This activity has since been transferred to another location and replacement at the former site is not required. It is proposed that a battalion-size classroom will be constructed in area D–3 adjacent to Lawson Field. There are no existing facilities in this area suitable as classrooms.

ENLISTED MEN'S BARRACKS

These barracks are required to provide permanent housing for enlisted personnel now occupying mobilization-type 63-man and 74-man barracks. The new barracks will be constructed in the Kelley Hill area and supporting facilities will be required since this site is an entirely new development approximately 3 miles from any existing housing. The existing temporary barracks will be maintained on a standby basis for use in case of a national emergency and for occasional use by ROTC and USAR units.

If these barracks are eliminated from the program, it will mean continuance of the adverse morale effect resulting from some troops occupying temporary-type barracks while others nearby have much better quarters in permanent buildings.

FORT BRAGG, N. C.

The next station is Fort Bragg, N. C. We are requesting funding for 490 sets of family quarters, costing $6,531,000 broken down into 390 noncommissioned officers, 88 company grade and 12 field grade. The total requirements are 8,074. The assets we have are 2,243, of which 2,000 are Wherry. Our deficiency is 5,831.

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Again, sir, this is another case where we do not compete with the Wherry housing for the reasons I stated in my prior testimony. The other items at Fort Bragg are 3 regimental dispensaries, $287,000; a main post exchange with cafeteria, $467,000; 3 branch post exchanges, $203,000; a regimental chapel, $148,000; 5 enlisted men's barracks, $3,259,000; an addition to water filter plant, $340,000; the paving of Gruber and Longstreet Roads, $553,000; paving of Knox Street, $161,000; a parachute packing and maintenance building, $998,000; 12 battalion classroom buildings, $615,000; roads and parking area in connection with Smith Lake, $85,000; maintenance hangar with shop at the Smith Lake area, $536,000; hardstand and taxiways at Smith Lake, $565,000; a battalion headquarters building, $34,000; and a fire and rescue building at Smith Lake, $72,000. Also 9 motor repair shops, $773,000; motor park facilities, $32,000; and then, Mr. Chairman, I believe 2 additional items that you referred to, which this committee denied last year—a bowling center for $122,000 and an addition to the officers open mess at $217,000. Is that correct, Mr. Foster?

Mr. FOSTER. That is correct.

Mr. RILEY. I notice you have a regimental chapel of 300 seats at $148,000. I recall one we had a while back that I think was $171,000. Why is there that difference?

Mr. FOSTER. The cost estimates, Mr. Chairman, are made locally and may vary with geographical location in the United States, plus a differential in the outside utilities cost.

Colonel SHULER. That is the principal reason. A utility item will vary up or down, depending on conditions.

Mr. RILEY. All right. You may proceed, Colonel.

REGIMENTAL DISPENSARIES

Colonel SHULER. The 3 dispensaries proposed will serve 13,150 enlisted men of the 82d Division to be housed in permanent barracks now under construction and scheduled for completion in 1955. The division now occupies a temporary barracks area in which five I–2-type dispensaries are located. Because this temporary area is closest to training areas and because the buildings have been maintained to a higher standard than other more remote temporary-housing areas, it is the most desirable temporary barracks area at Fort Bragg. It is, therefore, planned that, as the area is vacated by division troops and occupied by troop units now quartered in less desirable areas, these areas will in turn be placed on standby status with a minimum of maintenance. Troops moving into the vacated division area will utilize the 5 existing dispensaries to capacity, thereby leaving the nearest available temporary dispensaries approximately 5 miles from the new permanent division area. Since this is beyond reasonable walking distance, it will be necessary to divert a portion of the permanent barracks space to be used as dispensaries if this project for three permanent dispensaries is deferred.

MAIN POST EXCHANGE WITH CAFETERIA

This project is required to provide central exchange services for the convenience of personnel assigned to this installation and their dependents. A cafeteria is required to provide central dining accom-

modations since only temporary facilities are available. The present temporary main post exchange limits services to a retail store with a sales area of 8,500 square feet, a snack bar of 1,700 square feet, and a beauty shop of 500 square feet, with the remaining space used for administration, storage, and heating plant. The barbershop, laundry and dry-cleaning pickup, tailor shop, repair and photo shops, which should all be located in one building, are now located in widely separated temporary buildings. Two temporary cafeterias are now in use, one near the shop and administration area, which is too small to serve personnel from other areas, the other cafeteria is in a troop area, which is located too far away from main area. Many people drive several miles off the post for meals.

The existing post exchange building will be retained for storage until permanent storage building is provided. A central main post exchange and cafeteria, providing all these services at one location will improve troop morale.

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BRANCH POST EXCHANGES

This project is required to provide post exchange facilities for 9,850 enlisted men to be assigned to a permanent barracks area now under construction. Enlisted men who will occupy the new barracks are now housed in a temporary area with 5 post exchanges. As these troops move into the permanent barracks the barracks which they vacate will be occupied by troops now housed in less desirable areas of the post and the existing post exchanges will continue in use. The post exchange now authorized in the fiscal year 1955 program for the new area can serve about 3,300 men. Other available post exchanges are 5 miles away, which is beyond reasonable walking distance. If this project is deferred it will be necessary to divert permanent barracks or administrative space to provide space for sales of toiletries, confections, snacks, and so forth, which are essential to troop morale.

REGIMENTAL CHAPEL

The project is required to provide facilities for religious worship by 4,385 enlisted men to be assigned to the new permanent barracks now under construction. These troops are now quartered in a temporary barracks area in which there are five chapels. Because this temporary area has been maintained to a high standard and is close to training areas it will be occupied by troops now quartered in less desirable areas of the installation. The existing chapels will continue in use. The only chapels available to occupants of the new barracks are 5 miles away and beyond reasonable walking distance. If this project is deferred it will be necessary to divert permanent barracks space to chapel use in order to provide religious guidance for the troops to be assigned to the new barracks area. Existing chapels will be retained for interim and mobilization requirements.

ENLISTED MEN'S BARRACKS

This project is required to provide housing for a part of the 12,964 troops of 1 airborne division. Of the 13,704 permanent barracks spaces, existing or financed, only 11,750 spaces will be available for this division. These 11,750 units added to the 1,630 spaces in this

project will total 13,380 spaces, or 3 percent excess spaces for unit integrity as compared with a normal 10 percent. This will permit housing the entire division in one area. Division troops now occupy temporary barracks constructed in 1940–41 which are in fair condition and will be retained for interim and mobilization requirements. Deferment of this project will prevent consolidation of division units into one area and will create morale and administrative problems.

ADDITION TO WATER-FILTER PLANT

The existing water-filtration plant has a capacity of 7 million gallons per day which was adequate until the construction of 2,000 Wherry housing units, conversion of temporary structures to 1,124 family housing units and, extensive air-conditioning installations. An accelerated summer training program for the past 4 years added from 5,000 to 35,000 general and Reserve troops to the normal population further aggravating the water shortage.

During prolonged dry spells peak demand has exceeded the rate of 12 million gallons per day at which time water for fire protection has been practically nil in certain areas. Severe water-conservation measures have been necessary to restore normal reserve storage with adequate pressure. Deferment of this project will continue a summertime restriction on vehicle washing, lawn watering, and domestic use of water, to insure pressure for fire protection.

PAVE GRUBER AND LONGSTREET ROADS

This project is required to provide permanent roads for vehicular and tracked equipment traffic at this installation. Longstreet Road is the most direct route between the administrative, shop, and warehouse areas and the area of permanent housing for 13,150 enlisted men now under construction. This road is also the route of tank and artillery traffic from repair shops to range areas and daily grading is necessary to maintain a safe and usable surface.

The major portion of approximately 13,479 vehicles which now travel on the paved road into the temporary division area are expected to use Longstreet Road when occupancy of the permanent division area begins in 1955. The 3,400-foot section of Gruber Road proposed for paving under this project will provide an all-weather road between the temporary and permanent division areas. Since many support facilities, including division headquarters, in the temporary area must continue in use for an indefinite number of years, it is highly desirable that a paved connecting road be provided.

Deferment of this project will require continuance of daily scraping and grading of Longstreet and Gruber Roads.

PAVE KNOX STREET

This project is required to provide an all-weather permanent road 6,741 feet in length, connecting the new permanent warehouse area and the main cantonment area. It will also provide access from Highway 87 over which commercial vans making deliveries to the warehouse are routed. This road will also become a primary link between the installation road system and the United States highway

into Fayetteville, N. C. Deferment of this project will necessitate continued maintenance of Knox Street and routing of commercial van traffic through the cantonment area.

PARACHUTE PACKING AND MAINTENACE BUILDING

Airborne training at Fort Bragg requires approximately 20,000 parachutes per month. After use each parachute must be dried, cleaned, inspected, repaired if necessary, and packed. Parachute maintenance facilities are in three 12,000 square feet temporary packing sheds at Pope Air Force Base 4 miles from the barracks occupied by parachute packing and maintenance personnel, necessitating 5,200 man-miles travel per day. One building is used for maintenance and two for packing.

Lack of work makes 1 of 3 assigned parachute-packing platoons inoperable. Lack of storage space adjacent to maintenance areas for used parachutes requires not only a constant shifting of these parachutes within the maintenance areas, but requires utilization of storage space located 4 miles away. This extra handling, which requires from 35 to 50 men daily, could be eliminated if storage space was available adjacent to the maintenance areas. Also, lack of space makes necessary a 4-hour night shift 5 or 6 nights each month; because of exacting requirments for parachute packing, night work is considered dangerous. The project will provide, within walking distance of barracks of operating personnel, a facility adequate to maintain 20,000 parachutes per month.

BATTALION CLASSROOM BUILDINGS

This project is required to provide educational and training facilities for 13,150 enlisted men to be housed in a new permanent troop housing area now under construction. This project will provide 1 classroom building for each of the 12 battalions to be housed in the area. Classroom instruction is an integral part of troop training and if this project is deferred it will be necessary to divert permanent barracks space to classroom use. There are no existing facilities in this new area.

ROADS AND PARKING AREA (SMITH LAKE)

This project is required to provide parking area for 52 cars, a 2,000-foot all-weather road to connect the cantonment area with Smith Lake Army Airfield and a 2,500-foot road from the aircraft parts warehouse to the field maintenance hangar. The present road from the cantonment to the Smith Lake Airfield is clay surfaced. There is no road from the field maintenance hangar to the aircraft parts warehouse.

MAINTENANCE HANGAR WITH SHOP (SMITH LAKE)

This project will provide required hangar and maintenance shop for a heavy helicopter unit. Army aircraft field maintenance facilities are located in a balloon hangar which was moved from another installation and erected at Fort Bragg in 1935 at a cost of $105,000. Repairs necessary to maintain the building are estimated to cost $60,000 and are not considered justified because the structure is not designed to

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maintain the 155 Army aircraft assigned. This hangar only provides a clear area of 70 feet by 200 feet for aircraft and as a result it is necessary to tow planes near the front of the hangar to the outside in order to remove planes from the back of the area. Flight access to the balloon hangar is perpendicular to and within the glide angle of the 7,500 runway at Pope Air Force Base.

The balloon hangar cannot be seen from the Pope Air Force Base control tower, and on frequent occasions atmospheric conditions prevent radio contact between Army aircraft and the tower. Several near collisions have occurred because of this condition. The balloon hangar will be salvaged after construction of an adequate Army aircraft field maintenance hangar.

HARDSTAND AND TAXIWAYS (SMITH LAKE)

This project is required to provide hardstand for the 23 helicopters of 1 company, an apron for the field maintenance hangar, and taxiways connecting these areas with the Smith Lake flight strip. Hardstand is available for only 1 of the 2 helicopter companies assigned. During the winter of 1952–53, 21 H–19 helicopters were based on a grassed field. The air blast from the rotors destroyed the sod and damage from dust alone was so excessive that repairs costing approximately $1 million had to be made before the 21 aircraft could be returned to service. Delay in approval of this project will result in an annual expenditure of a similar amount.

BATTALION HEADQUARTERS BUILDING

This project is required to provide facilities for administrative, supply, and command functions for the 1,315 enlisted men who will be housed in the five 263-man barracks now approved for construction in the fiscal year 1955 MCA program. The enlisted men to be assigned to these barracks are now housed in temporary barracks located 2 miles away. If this project is deferred it will be necessary to divert permanent barracks spaces to battalion administrative use.

FIRE AND RESCUE BUILDING (SMITH LAKE)

This project is required to provide fire fighting and rescue facilities for protection of the 155 Army aircraft and hangars, shop, administrative, and storage buildings including one warehouse in which are stored aircraft parts valued at more than $15 million. The nearest fire station is 3 miles away.

MOTOR REPAIR SHOPS

Recently one 5-bay motor repair shop building was provided in each of three motor parks, a requirement to support the existing forty-five, 263-man permanent barracks. A total of 1,380 motor vehicles, including 614 from division artillery will be assigned to the 3 motor parks which will require each shop to maintain 460 motor vehicles. Army Regulation 415–31 provides that 1 shop will be provided for each 125 motor vehicles. However, barracks occupancy on an interim basis will increase the number of troops to be accommodated and will increase the vehicles in the motor parks so that a

ratio of 1 shop to 125 motor vehicles will be maintained. The nearest available temporary motor shops, which would be used if this project is deferred, are located 5 miles away.

MOTOR PARK FACILITIES

Each of 3 regimental motor parks constructed under the fiscal year 1952 MCA program was provided with 4 vehicle wash platforms and 1 oil house. Each of the wash platforms must service 125 vehicles, whereas Department of the Army design criteria for motor parks provides 1 wash platform for each 50 vehicles. This project will increase the number of wash platforms in each regimental motor park to 10 and will permit frequent washing of the approximately 500 vehicles assigned to each regiment.

One oil storage building now existing in each motor park meets only 50 percent of the requirement. This project will provide an additional building for each regimental motor park for the storage of lubricants for approximately 250 vehicles.

BOWLING CENTER

On the bowling center, again this project is exactly the same as we would give any other permanent installation of the size and composition of Fort Bragg. It is in accordance with Army Regulations 415–31, which sets the criteria and allows the post to come in for this type of installation. We have 10,687 square feet of bowling alley facility, and this would give us 9,000 more which would alleviate our deficiency in our requirement for a permanent peacetime Army.

The existing facility that we are using does not meet the requirements for this type of activity and the surrounding communities are too small to support such a facility. Only limited commercial facilities of this type exist at Fayetteville, which is 10 miles away.

Mr. Chairman, if we can we would like to provide as many recreational facilities for our troops on our posts as we can rather than have them have to go into town.

Mr. RILEY. Do you find that bowling is a pretty popular recreation?

Colonel SHULER. Yes, sir. Bowling is very popular, and our experience throughout the Army shows that every bowling alley we have is greatly used. We have the same experience on swimming pools.

Mr. RILEY. All right.

ADDITION TO OFFICER OPEN MESS

Colonel SHULER. Next is the addition to the officer's open mess. This is required to provide open mess facilities for 3,328 permanent officer strength. The existing facility was designed for a permanent officer strength of approximately 2,000, and we cannot renovate it to meet present requirements. This would give us 12,800 square feet in this addition. I feel it is just as necessary at Fort Bragg as it is at any other post.

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Fort Campbell, Ky.

The next item is Fort Campbell, on page 288, and page 50 in the family housing book. The funding of the family housing is for 401 units costing $5,427,000 broken down into 304 noncommissioned officers, 80 company grade and 16 field grade, as well as one general or commanding officer's set of quarters. The total requirements are 8,476. The total assets are 1,536, of which 1,200 are Wherry housing, with a deficiency of 6,940.

I would like to point out again that as in most of our stations the replacement of inadequate temporary quarters constitutes most of this request. In this particular case it is 96 percent.

The additional items at Fort Campbell are 3 regimental dispensaries, $307,000; a regimental chapel, $148,000; 3 branch post exchanges, $197,000; hardstands in 4 regimental motor parks, $675,000; a theater with stage, $369,000; 13 battalion classroom buildings, $676,000; 2 motor repair shops, $147,000; a battalion headquarters building, $39,000; motor park facilities, $212,000; and 7 enlisted-men's barracks, $4,180,000.

Mr. Riley. What town is Fort Campbell near?

Colonel Shuler. Fort Campbell, sir, is 8 miles northwest of Clarksville, Tenn.

Mr. Riley. How large a place is that? Is it right close to the State line there?

Colonel Shuler. Clarksville, Tenn., sir, I am sorry, but I do not have it, but I will furnish it for the record.

Mr. Riley. Will you insert it in the record, please?

Colonel Shuler. Yes, sir.

(Information requested is as follows:)

Population according to 1950 census is 16,246.

REGIMENTAL DISPENSARIES

Colonel Shuler. This project is required to provide facilities for the medical treatment and care of military personnel of 3 airborne infantry regiments assigned to the new barracks. Existing facilities are located in barracks urgently needed for troop housing. In addition, the physical layout of this space prohibits the proper care of patients.

REGIMENTAL CHAPEL

This project is required to provide facilities for religious worship by airborne troops housed in the new barracks. Troops now use existing mobilization type chapels located from 2 to 4 miles from this housing area. Deferment of this chapel will be detrimental to the morale and spiritual well-being of troops.

BRANCH POST EXCHANGES

This project is required to provide branch exchange facilities for three regiments of airborne troops assigned to new permanent barracks recently completed. The need is not being met as there are no exchanges in this housing area. Existing exchanges are of modified emergency type, located from 2 to 4 miles from the new area. Deferment of these exchanges would be detrimental to the welfare and

morale of military personnel. Existing exchanges will be retained for interim and mobilization requirements.

HARDSTAND (FOUR REGIMENTAL MOTOR PARKS)

This project is required for 4 regimental motor parks, each park to accommodate 500 to 600 vehicles. There is no hardstand for the existing motor parks, and vehicles are parked on light covers of crushed stone, or unsurfaced areas. The nearest hardstand available is in the temporary motor-park areas, located from 2 to 4 miles from the permanent motor-repair shops in the new motor parks. Deferment of this project would result in the continued use of unsurfaced areas which become muddy during inclement weather thus causing unnecessary wear and possible damage.

THEATER WITH STAGE

This project is required to provide facilities for the entertainment and training of troops housed in new permanent barracks. The nearest theater is 2½ miles from this housing area. There are 5 theaters on the post with a total seating capacity of 4,720. This includes 1 permanent-type 1,000-seat theater. On the basis of existing population the theaters, both permanent and modified emergency, are overcrowded. If this project is deferred overcrowded conditions will continue, and affect the morale and welfare of troops.

BATTALION CLASSROOM BUILDINGS

This project is required to provide educational and training facilities for 13 battalions of troops in the new housing area. There are no existing classroom facilities in the area and the need is being met by utilizing space in the new permanent barracks. Proper facilities cannot be provided in this limited space for indoor training. Deferment of this project will continue the use of urgently needed barracks spaces for troops.

MOTOR REPAIR SHOPS

This project is required to provide repair facilities for 2 motor parks which will complete the requirements for the 13 motor parks for the airborne troops. The maintenance and repair of organizational vehicles and equipment planned in these shops are being accomplished at present in two existing mobilization-type shops located in another area approximately 2½ miles away. Each vehicle dispatched to these shops for repairs or services must make a complete trip of 5 miles, resulting in much loss of time and material. Deferment of this project will result in an annual cost of approximately $50,000 and ineffective operations of the repair and servicing facilities of these two battalions.

BATTALION HEADQUARTERS BUILDING

This project is required to provide facilities for administrative, supply, and command functions for one battalion of troops in a new barracks area. This project will be in addition to 11 battalion headquarters buildings constructed in the fiscal year 1952 program. The need for this additional building is being met by using troop space in

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one of the new barracks. Deferment of this project will continue use of needed troop space.

MOTOR PARK FACILITIES

This project is required to provide servicing facilities for organizational vehicles at five motor parks which have not been completed. These facilities and the 2 motor repair shops will complete the requirements for the 13 battalion motor parks for airborne troops. Existing mobilization type facilities for servicing organizational vehicles are located in another area 2 to 4 miles away. Use of these facilities result in an annual cost of approximately $35,000 and ineffective operations within the new motor parks.

ENLISTED MEN'S BARRACKS

This project is required to provide permanent housing for enlisted personnel now housed in modified emergency-type barracks. Deferment of this project will result in an adverse effect on morale of those troops now housed in modified emergency-type barracks. Existing modified emergency-type barracks will be retained for mobilization use. A one-company type barracks, 263-man, is required to complete a group of one-company barracks, authorized in fiscal year 1955 program.

Mr. RILEY. I note some of these barracks are 263-man and some are 326.

Colonel SHULER. I believe there is one 263 and the remainder are 326. These will be funded from savings, that is from the $20 million that I reported as our estimate of the savings we effected in fiscal year 1955.

General LAWTON. One 263 barracks will fill in.

Colonel SHULER. It is to fill in an area of existing 263-man barracks.

Mr. RILEY. I understand from various and sundry projects you accumulated $20 million in savings, and these projects we are considering will absorb about $15 million of that. Is that right?

Colonel SHULER. That is correct, Mr. Chairman. Those savings were obtained from good bids, and from canceled projects where the need does not exist and it will be foolish to build them.

Mr. RILEY. It amounts to a reprograming of funds?

Colonel SHULER. That is right. We asked this committee's permission to utilize these funds.

Mr. RILEY. All right.

CAMP GORDON, GA.

Colonel SHULER. The next station is on page 299, Camp Gordon, in the State of Georgia, 12 miles west of Augusta. We are asking for one item which is a post chapel with religious, educational facilities, at a cost of $261,000. This project is required to provide facilities for religious worship and education in a central post chapel. No such facility exists. Nine existing mobilization-type regimental chapels have a total capacity of 2,250 seats, of which 6 with 1,500 seats are required for troops. Two regimental-size chapels were destroyed by fire on September 5, 1953, and have not been replaced, with the result that other chapels are overcrowded and divine services are

being conducted in temporarily converted buildings. This would give us a centralized post chapel.

Mr. RILEY. Is this permanent or semipermanent construction?

Colonel SHULER. This is semipermanent, which we call modified emergency. It is concrete block—this is a temporary station.

FORT JACKSON, S. C.

Mr. RILEY. This hospital at Fort Jackson, is this or is it not a war mobilization hospital, spreading over a wide area, which takes a considerable number of personnel to operate, and also is very costly to maintain?

Colonel SHULER. This is a World War II constructed mobilization-type hospital, similar to a number we have in the Army, some at temporary stations and some at permanent stations. It does cost more to operate it and it does cost more to maintain it than it would a permanent-type hospital.

Mr. RILEY. This hospital has been there, according to my information, for some time, and has reached a point where maintenance is very high.

Mr. FOSTER. The hospital was build in 1942, Mr. Chairman.

Mr. RILEY. I notice that the Army is replacing a good many buildings built in 1942.

Colonel SHULER. Mr. Chairman, in accordance with your request I would like to put in the record now the patient load at Fort Jackson in the present hospital, which is to be replaced by this permanent hospital and, therefore, the permanent hospital would accommodate this load.

Mr. RILEY. All right.

Colonel SHULER. This is for the 1954 year starting in January. I am reading the bed patients, in each month.

January, 576; February, 600; March, 648; April, 569; May, 509; June, 451; July, 391; August, 442; September, 475; October, 469; November, 467; and December, 422.

In addition to that we had an average of about 1,400 outpatients per month accommodated in this hospital.

Mr. RILEY. Thank you. That takes care of it. Now we will move on. I think maybe we can get in one more item.

FORT MCCLELLAN, ALA.

Colonel SHULER. The next station is Fort McClellan, on page 301. This, sir, is the WAC center in the Army and also the Chemical Corps Training Command. The items we are requesting money for at this station are 150 sets of family quarters costing $1,999,000, and it is broken down as 120 noncommissioned officers, 26 company grade, and 4 field grade. The total requirement is for 964 sets of permanent quarters. We have assets of 189, of which 140 are Wherry. The deficiency is 775 sets.

The additional items at Fort McClellan are 2 branch exchanges ($118,000), a chapel without religious, educational facilities ($154,000), a heavy equipment maintenance shop for the post engineer ($27,000), a boxing and crating shop for the post engineer ($10,000), a lumber and pipe shed for the post engineer ($13,000), a storehouse for the post engineer ($106,000), an equipment storage shed for the post

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engineer ($41,000), and miscellaneous additional post engineer facilities ($143,000).

TWO BRANCH EXCHANGES

This project is required to provide exchange facilities for approximately 4,600 military personnel assigned to this installation. At present there are no post-exchange services within three-fourths of a mile of the Chemical Corps Training Command area. Limited facilities consisting of dry cleaning and barber shops are available in an enlisted men's barracks. These facilities utilize 40 enlisted men's spaces which are needed for troop use.

The proposed branch post exchange will greatly increase morale of approximately 500 trainees and 1,700 permanently assigned enlisted personnel. Branch post exchange is required to provide exchange services for the WAC center and is essential to overall morale and welfare activities of the installation. Presently, exchange facilities occupy 40 barracks spaces, 2 laundry and drying rooms, and company administrative office which are urgently required for their designed use.

CHAPEL

A chapel is required to provide religious facilities for 2,500 enlisted men of the Chemical Corps Training Command. The only building presently available for a chapel is located six-tenths of a mile from this new area. This building, a converted officers' club, has a 300-man seating capacity. When project is approved present building will be used for such nonreligious functions as courts-martial and classroom training.

HEAVY EQUIPMENT MAINTENANCE SHOP

The shop is required to provide facilities for maintenance of post engineer heavy equipment. Need is currently being met by using a permanent warehouse-shop-type building originally constructed and used by quartermaster as automotive repair and maintenance shop. Existing building is permanent concrete construction, steel sash, steel overhead doors, structural steel clear trusses, wood decking and No. 210 strip shingles and will be available to transportation for second echelon maintenance upon completion of new post engineer facility which will house maintenance requirements for 102 items of heavy equipment, approximately 156 pieces per month. All second and approximately 25 percent of third echelon maintenance is to be performed in this shop. Elimination of this project would result in location of machine shop facilities in new structure completed in 1954 and heavy equipment shop in old location, 3,200 feet away, through heavily congested area which would present complicated coordination problems.

BOXING AND CRATING SHOP (POST ENGINEER)

This project is required to provide facilities for normal boxing and crating functions. An average of 75 overseas 5 feet by 7 feet 6 inch crates or approximately 3,000 tons per month are crated. In addition, an average of 1½ railroad carloads of household furnishings are received per month, unloaded, uncrated, and delivered by the Transportation Corps within a 150-mile radius in accordance with

current regulations. Existing building T–3742, mobilization-type warehouse now used for interim mission is not large enough for boxing and crating workloads.

Approximately 3,500 square feet of Building 2051 will revert to quartermaster when this project is approved. Deferral of this project will result in higher operation costs estimated at 6,240 man-hours per year, or approximately $11,000 for the use of additional trucking.

LUMBER AND PIPE SHED (POST ENGINEER)

This project is required to provide storage for average of 35,000 board-feet of lumber, framing and finish grades and 40,000 lineal feet of pipe. The prolonged open storage of lumber results in increase of moisture content over allowable 17 percent due to high relative humidity, approximately 80 percent, experienced in this vicinity seven-twelfths of the year. Fifty percent of the pipe stored is black iron. Prolonged exposure to inclement weather produces excessive oxidation, especially to threads and couplings. A large inventory of pipe is maintained due to extension in annual increments of natural gas distribution system at this post.

This facility will be used temporarily from time to time to store bagged cement for projects. Estimated annual 24 by 36-foot tarpaulin replacement and/or repairs and waterproof treatment is as follows: Complete replacement, 15 and repair and waterproof, 30; approximate value of $3,525 per year. One man-year of time is consumed by use of tarp covering of lumber stored outdoors. Elimination of this project would result in continuance of present procedure at total average cost of $7,000 per year.

STOREHOUSE (POST ENGINEER)

This project is required to provide for post receiving, storing, and reissue of engineer maintenance and repair items such as plumbing, heating, sheet metal, electrical, carpentry, refrigeration units and repair parts. Area requested, 13,260 square feet, will be utilized to store an approved stock level value of $95,000 worth of parts, plus seasonal, National Guard, and obsolete and excess materials and parts awaiting shipment. Administration space is required for maintaining shipping documents, locater file, and so forth.

Procedure of shops drawing material for each job, exclusive of preventive maintenance, makes location of this facility in close proximity to shop area a very important factor. Elimination of this facility would result in additional expenditure of an estimated total of 2 man-years plus transportation of personnel the distance of 1 mile to existing storehouse to obtain supplies.

EQUIPMENT STORAGE SHED (PORT ENGINEER)

The equipment storage shed is required to store from 19 to 55, according to size, pieces of the 102 pieces of equipment on hand and being used, according to the season, that is, storage of mowing and paving equipment during winter months, etc. No loss of equipment has been experienced due to outside storage. However, exposure to inclement weather of temporarily unused equipment has necessitated more frequent cleaning and painting to obtain satisfactory or good

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ratings on equipment maintenance inspections. Presently, due to outside storage, each piece of equipment receives annually a complete cleanup and paint job, including restenciling of identification serial numbers in addition to touchup jobs when required. Average annual cost incurred for this operation is $5,100.

ADDITIONAL POST ENGINEER FACILITIES

This project is required to provide facilities to complete post engineer area. Spur track required to transport 57 to 70 carloads per year. Railroad spur now being used will service quartermaster warehouse when vacated by post engineer. Bituminous and concrete paving will complete required paving for area. Chain link fence is to provide security enclosure for post engineer yard; emergency trucks, unattended after normal working hours and have tools, replacement parts and repair materials which may be stolen.

Some construction materials are at times temporarily stored in yard until used. Post engineer submotor pool of 96 vehicles will be parked unattended within this enclosure overnight. Flammable storage is to be used for storage of solvents, thinners, equipment oils and greases, etc., and approximately 1,000 gallons of flammable liquids, plus 500 to 800 pounds of grease will be housed in structure. The railroad tool house will be used to store one gas-driven work car plus two flat trucks, jacks and railroad tools. Wash platforms and grease rack will be used to service 50 pieces of wheeled equipment and 96 motor vehicles.

CAMP RUCKER, ALA.

The next station, Mr. Chairman, is Camp Rucker, Ala. The request there is for minimum facilities to allow us to continue and accomplish the mission of the Army aviation center, which the chairman and the committee will recall was moved from Fort Sill last fall.

These facilities, as the Secretary of the Army pointed out in his testimony before the full subcommittee, are for activities previously accomplished at Fort Sill prior to the move. The facilities are as follows:

Hardstands and taxiways for fixed wing aircraft, $363,000; maintenance shop for fixed wing aircraft, $251,000; hardstands for stagefields, fixed wing and rotary wing, $639,000; a maintenance shop for fixed wing aircraft at one of the auxiliary fields, $251,000; an operations building with control tower for the helicopter flight training at one of the auxiliary fields, $147,000; a parachute packing and drying building for fixed wing aircraft, $18,000; an operations building with control tower for fixed wing aircraft, $147,000; an operations building with control tower for fixed wing aircraft at another field, $200,000. The first one I read was at auxiliary field No. 1, and the second at Ozark Air Force Field. A fire and rescue building for rotary wing, $27,000, and a fire and rescue building for fixed wing, $27,000. These are at different fields. The total amount of money is $2,070,000.

Mr. RILEY. How many auxiliary fields do you propose to have down there?

Mr. FOSTER. There will be, Mr. Chairman, Ozark Army Air Field, which exists south of the reservations as 1 base field; 2 auxiliary base fields; 22 stagefields; and 29 landing strips.

Colonel SHULER. These latter are just a very minimum airfield strip.

Mr. RILEY. They amount to classroom work?

Colonel SHULER. Yes, sir. They touch down and take off. They are very minimum strips.

Mr. FOSTER. I have a map of the post here, showing all of the facilities, if the Chairman would like to see it. The various types of fields are on a graduated scale. The base fields are where the aircraft are maintained and the stage fields are used by groups of students, where classroom instruction is given. The landing strips are for individual student practice.

HARDSTANDS AND TAXIWAYS (FW), OZARK AAF

Colonel SHULER. This project is required to provide partial requirements for operation, parking, storage and minor maintenance of 231 fixed wing Army aircraft assigned to the Army aviation school, 15 fixed wing and 10 rotary wing aircraft assigned to Army Field Forces Board No. 5 (Army Aviation Test Section), or a total of 256 Army aircraft, plus 10 percent additional for transient aircraft. Besides the existing 9,500 square yards of hardstand, grassed and soil areas are now being used.

The use of nonpaved areas increases the maintenance cost by $900,000 per year, due to dusty conditions, and provides a potential hazard that could result in failure of aircraft in flight and interruption of student training.

MAINTENANCE SHOP (FW), OZARK AAF

This shop is required to permit disassembly and inspection of aircraft during inclement weather, so that maintenance may be accomplished. There is not sufficient space available (23,000 square feet), nor funded (23,000 square feet), to accomplish organizational maintenance. One hundred and fifty planes will be housed and maintained at this point. Required maintenance work will be deadlined unless the additional shop is provided. In addition, 106 aircraft operating from auxiliary field No. 1 will be satellited on these facilities for higher echelon maintenance.

HARDSTANDS FOR STAGEFIELDS (FW AND RW)

This project is required to provide partial requirements for hard-surface, dust-free stagefields, which will be used for student training during all seasons to eliminate necessity for rotation of unpaved fields. Each stagefield affords an area for 20 aircraft used in training small groups. Separation of the total students into small groups provides greater safety and permits 50 percent more training in time available. Cost of aircraft maintenance will be reduced by elimination of dust and sand condition due to type of soil.

MAINTENANCE SHOP (FW), AUXILIARY FIELD NO. 1

This facility is necessary to provide direct technical service maintenance support to the using organization. It will provide partial requirements for field maintenance of 106 fixed wing aircraft to be

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operated from auxiliary field No. 1, and prevent unnecessary evacuation of disabled aircraft to depot maintenance facilities.

OPERATIONS BUILDING WITH CONTROL TOWER (RW), AUXILIARY FIELD NO. 2

This project is required to provide partial facilities for control of flight-operations activities, such as, briefing room, dispatch, weather, parachute storage and issue, toilets, and radio control tower for the operation of 269 rotary wing aircraft plus 10-percent additional transient traffic.

PARACHUTE PACKING AND DRYING BUILDING (FW), OZARK AAF

This project is required to provide facilities for inspection, drying, packing and repacking of parachutes at 60-day intervals. This work is being accomplished by the Airborne School at Fort Benning, but when the Army Aviation School is in full operation, the time spent in packing and transporting the chutes to and from Fort Benning would be prohibitive.

OPERATIONS BUILDING WITH CONTROL TOWER (FW), AUXILIARY FIELD NO. 1

This project is required to provide facilities for control of flight operations activities, such as briefing room, dispatch, weather, parachute storage and issue, toilets, and radio control tower for the operation of 106 fixed-wing aircraft plus 10 percent additional transient traffic.

OPERATIONS BUILDING WITH CONTROL TOWER (FW), OZARK AAF

This project is necessary to provide facilities for controlling all base flight operations activities of 256 assigned Army aircraft and all transient aircraft on a 24-hour operational basis. It will provide the basic facilities for base weather, flight dispatch, flight planning, transient lounge, parachute storage, radio aids, and control tower. In essence, this is the main gate to Camp Rucker and the Army Aviation School, inasmuch as the arrivals and departures of all important personnel are by aircraft. A normal operational day at this facility will be 24 hours.

Student flight training is required for a period of 12 to 16 hours a day, which will involve the use of such radio training aids as ground control-approach and direction-finding equipment in addition to the normal radio tower control and will result in almost continual radio traffic on minimum of three frequencies. This facility will also transmit and receive all flight plans and exercise control of instrument flight rule traffic.

FIRE AND RESCUE BUILDING (RW), AUXILIARY FIELD NO. 2

This facility is to provide housing for one 0–10-type fire and rescue vehicle, 1 ambulance and the crew assigned on a 24-hour basis, ready to respond to plane-crash alarms immediately without requiring equipment warmup period.

FIRE AND RESCUE BUILDING (FW), AUXILIARY FIELD NO. 1

This facility is to provide housing for one 0–10-type fire and rescue vehicle, 1 ambulance and the crew assigned on a 24-hour-duty basis, ready to respond to plane crash alarms immediately, without requiring equipment warm up period.

Mr. RILEY. What type of construction do you propose for these new buildings?

Colonel SHULER. Mr. Chairman, naturally the hardstands would be of a permanent type. But on the new buildings these are modified emergency type, and I would like to tell the committee that this program originally called for $10 million worth of facilities, and we in the Department of the Army cut it down to what we considered to be the minimum to get by until we can get Camp Rucker made a permanent station, at which time we would come in for permanent construction, as we do on all permanent stations. It is now a temporary station, but it is the home of the Army aviation center, and I feel it will be eventually made, as soon as we can, a permanent station.

Mr. RILEY. This will be semipermanent construction, will it not?

Colonel SHULER. Concrete block and concrete slab and the very minimum of it we need right now to get by until we can put permanent construction in there. And we will not lose any of it by so doing.

CAMP STEWART, GA.

Colonel SHULER. The next station, Mr. Chairman, and the last station in the book in the Third Army is Camp Stewart, Ga. The mission there is the training of antiaircraft artillery and armored units. The facilities we are asking for at this station are a POL dispensing station, $51,000; rehabilitation of the sewer system, $55,000—it is the second increment of that rehabilitation—4 tank-repair shops in the battalion motor park, $132,000; a hardstand in the battalion motor park, $112,000; 4 storage sheds in the battalion motor park, $53,000; additional motor-park facilities, $75,000; a field maintenance shop for the post engineer, $290,000; and alterations to 26 temporary messhalls, $199,000.

I might point out that this construction is all modified emergency because this is a temporary station.

ALTERATIONS TO 26 MESSES

Mr. RILEY. I would like for you to expand on the alterations to the 26 messes.

Colonel SHULER. I will give you that now. In answer to your question on this item it is required to modify 26 mobilization-type messes to accommodate the additional equipment authorized in accordance with the engineer guide plan for the rehabilitation of company-type kitchens. Presently the minimum kitchen equipment is in use. We would like to make these modifications to provide an additional capacity of 30 kilowatts of power for the operation of electric grills, toasters, and coffee urns, as well as doughmixers, meat grinders, and slicing machines.

These messes will be located in four battalion areas, and in areas occupied by smaller units and special troops. We feel we should not replace these buildings and go to the much more costly arrangement

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of new buildings. But, rather, this is money well spent in modifying these buildings on which the maintenance costs are not too high. They are in a pretty good state of repair, and this will give these troops a much better facility in which to eat. They can use more modern equipment and we can take care of our troops much better than we can now.

Mr. RILEY. All right, Colonel.

POL DISPENSING STATION

Colonel SHULER. This project is required to provide fueling facilities for four tank battalions. It is anticipated that, with the present tank-training missions for Camp Stewart, an average of 4 tank battalions will be in training at 1 time. Presently each battalion motor park is equipped with two standard commerical-type dispensing pumps. To refuel tanks operating as far as 29 miles and retura, these pumps require an average time of 50 minutes for refueling per tank. The proposed system would refuel 12 tanks in approximately 10 minutes and would be located on the tank trail en route to the training areas. Considerable time would be saved in traveling to the refueling point as well as the refueling time itself.

The access streets, hardstand, and pumps of the existing facilities are not designed or located to serve this type of operation.

REHABILITATION OF SEWER SYSTEM

This project is required to replace existing sewer lines constructed during World War II which have deteriorated to the extent that leakages in the lines are impracticable to repair. Many of these lines are wooden pipe. In addition, a part of the existing sewer system requires rehabilitation only. The fiscal year 1953 MCA program included authorization and appropriation of $150,000 for the first increment of this work. This part of the project will complete requirements for effective operations.

TANK REPAIR SHOPS

This project is required for the repair and maintenance of medium tanks assigned to organizational units. In order to provide facilities for this purpose it is proposed to modify the standard plan (3,127 square feet—6 stalls) to provide a shop with 4 stalls. The standard plan provides for 6 stalls which are not wide enough for the tanks. There are no repair and maintenance facilities for tanks. Each medium-tank battalion is authorized approximately 139 wheeled vehicles and 71 tanks. Existing shops of 3,127 square feet will service the wheeled vehicles while the proposed shops will service the 71 medium tanks. Segregation of the two repair facilities is essential for operating efficiency.

HARDSTAND

This project is required for parking, servicing, and minor repairs to the medium tanks assigned to the tank battalions, and will support the tank repair shops. Existing hardstands were constructed of stabilized material which has become thin and will not support the

weight of these tanks. In addition, it is in such condition that repairs are not practicable. These motor parks were not originally designed for occupancy of tank battalions.

STORAGE SHEDS

The existing motor parks are designed for antiaircraft gun battalions. Each is equipped with one mobilization-type storage shed, 46 feet by 144 feet. These sheds have 12-foot bays. The project is required to provide storage sheds of 18-foot bays for 4 medium-tank battalions to accommodate the M–48 tanks. Each battalion is assigned 210 vehicles and tanks which require twelve 12-foot bays for first echelon maintenance and storage for 139 wheel vehicles and eight 18-foot bays for 71 tanks.

ADDITIONAL MOTOR PARK FACILITIES

The existing motor-park facilities are designed for antiaircraft gun battalions. Each contains 1 mobilization-type repair shop, 3,127 square feet, 1 storage shed, 1 gas station with 2 pumps, 1 grease rack 2-car, 1 oil storage house, and 1 wash platform 2-car, for 2 battalions. With approximately 210 vehicles, 139 wheel and 71 tanks, per medium-tank battalion, it is proposed to add 1 grease rack, modified for tanks, 1 wash rack, modified for tanks, and 1 gas station, 2 pump (on the basis of 1 nozzle per 50 vehicles), 1 oil storage house, 1 dispatch office, and to fence the battalion areas separately.

FIELD MAINTENANCE SHOP (ENGINEER)

This project is required to provide facilities for the maintenance of engineer equipment assigned to National Guard units in Florida, Savannah, and Jacksonville districts, and this installation on a return-to-the-user basis. The existing shop used for this purpose is a mobilization-type structure located in the ordnance area. In view of the increase of 40 medium tanks and 30 turret trainers over and above the 86 tanks assigned for accomplishment of the training mission, Ordnance has an increased maintenance responsibility. As a result, maintenance of engineer equipment can no longer be accomplished in this shop because of its limitations. The new shop will be designed to maintain between 600 and 1,000 items of equipment.

Mr. RILEY. That will conclude the session for today. We will try to meet tomorrow afternoon.

Colonel SHULER. Thank you, sir.

THURSDAY, JUNE 30, 1955.

FOURTH ARMY FACILITIES

Mr. RILEY. The committee will come to order.

Colonel Shuler, I understand we are to take up the Fourth Army projects today where we suspended day before yesterday.

Will you proceed, please.

Colonel SHULER. Yes, sir, Mr. Chairman.

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Fort Bliss, Tex.

The first station in the Fourth Army is Fort Bliss on page 331 of your large book and on page 54 of the family housing book.

The items requested at Fort Bliss are 3 bachelor officers' quarters; 18 battalion headquarters buildings; a regimental chapel; a branch post exchange; 6 motor-repair shops for 6 battalion motor parks; hardstands for 6 battalion motor parks; motor park facilities for 6 battalion motor parks; and 24 battalion classroom buildings.

These items are troop-support facilities to give us the troop support for the new barracks built, or being built, at Fort Bliss and for which we do not have the facilities.

BACHELOR OFFICERS QUARTERS

The first item is 3 bachelor officers quarters, $949,000.

This project is required to partially alleviate a serious shortage of permanent quarters for bachelor officers at this installation. Of the 672 spaces required, 41 percent of 272 are provided in permanent-type structures. The remaining spaces are provided in mobilization-type bachelor officers' quarters or converted enlisted men's barracks which lack comfortable living facilities and are unsuitable for proper home study. Existing conditions have an adverse effect on the morale of the student officers.

BATTALION HEADQUARTERS BUILDINGS

The next item is 18 battalion headquarters buildings, $804,000.

This probject is required to provide facilities for administration, supply, and command functions for 18 battalions (14,500 enlisted men) to be assigned to permanent barracks (now under construction or funded) in a new area where no such facilities exist. Failure to provide these facilities will necessitate that barracks space of the required area be utilized for the administrative, supply and command functions and troops displaced will be obliged to remain in temporary hutments.

Mr. Miller. These 18 headquarters battalion buildings that are scheduled, does that signify there are 18 battalions of barracks available?

Colonel Shuler. Yes, sir. There are actually 24 and these are 14 we are requesting of that 24. I have the total figures.

Mr. Miller. I knew you had quite a development at Fort Bliss. I have been there fairly recently. Do I understand your normal procedure is that the headquarters buildings come along after you build the barracks?

Colonel Shuler. We would like to build them at the same time, but the various limitations we have, both authorization and money, cause us to plan them in yearly increments. So it is a fact we have been behind on some of the supporting facilities and have gotten our men into permanent barracks sooner.

Mr. Miller. Your priorities are first to provide the quarters for the enlisted men?

Colonel Shuler. Yes, sir.

Mr. MILLER. And normally you do not build battalion headquarters buildings and these classrooms until you have gotten your barracks for that particular section?

Colonel SHULER. That has not been our intent, but it has been our experience. In other words, because we do not have enough authorization and enough fund ceiling in our program we have been unable to have these concurrently in every case.

Mr. MILLER. I understand you would like to put them all in at one time if you could?

Colonel SHULER. Yes, sir.

Mr. MILLER. But it has been the practice to give the first priority to the living accommodations for your soldiers?

Colonel SHULER. Yes, sir.

Mr. MILLER. I think that is proper.

Colonel SHULER. We do, too, sir.

Mr. FOSTER. We hope by next year or the year after to be caught up and thereafter to program these facilities with the barracks.

Mr. MILLER. That is all I have.

REGIMENTAL CHAPEL

Colonel SHULER. The regimental chapel is required to provide facilities for religious training of approximately 14,500 enlisted men to be assigned to barracks either under construction or funded. These barracks will be located in a new area where no such facilities exist. The nearest chapel, of 200 seats, is located more than 2½ miles distant and is used to capacity and cannot accommodate these additional troops. Other chapels are located from 4 to 6 miles from the new barracks area. Deletion of this project will prevent an accomplishment vital to the training and morale of troops in this area.

Mr. RILEY. In connection with your need for a regimental chapel, is this not an old base?

Mr. FOSTER. Yes. It was founded, actually, in 1848, but a new barracks area is being built about 2 to 3 miles northwest of the existing post center and this regimental chapel is to support one regimental bloc of those new barracks.

Mr. RILEY. And those other facilities are also to support this new area to a large extent?

Mr. FOSTER. That is right, sir.

BRANCH POST EXCHANGE

Colonel SHULER. The next item is a branch post exchange, $65,000. This facility is required to permit the purchase of merchandise by 4,410 men who are housed in 15 new 263-man barracks. No post exchange exists in the area that could be utilized for this activity. At present, the need is being met by the main post exchange located approximately 1 mile away. The main post exchange was established in 1921 for 3,000 men, whereas 30,000 men are now stationed at Fort Bliss. It is continually crowded and unable to serve all patrons efficiently. Should this construction be deferred, a continuation of the unsatisfactory condition will be necessary with adverse effect on the morale of troops.

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MOTOR REPAIR SHOPS

The next item is 6 motor repair shops for 6 battalion motor parks, $771,000.

These facilities are required in support of 24 263-man barracks constructed in an isolated area with prior funds. No facilities exist that can be utilized; 9,600-square-foot shops are requested in lieu of standard 5,200-square-foot motor repair shops which are too small to accommodate all repairs required by 154 self-propelled vehicles and 144 units of trailer-type equipment assigned to an AAA and GM battalion. Many vehicles are heavy type (cranes, launchers, and erectors, and so forth) and require considerable time in the repair shop. World War II 3,000-square-foot T/O type motor repair shops currently used are located 3½ miles distant and have deteriorated to the extent that demolition will be necessary in the near future. Further, existing space is so limited that much of the equipment must be repaired in the open where there is a constant danger of blowing sand and dust entering the motors and hydraulic mechanism. Presently, it is necessary to store spare parts for equipment under repair in unfenced areas under guard. Deletion of this project will have a serious effect on the accomplishment of the scheduled training of the troops assigned to the new barracks area.

HARDSTANDS

The next item is hardstands for 6 battalion motor parks, $417,000.

These facilities are required for parking and accomplishment of minor repairs and servicing of vehicles assigned to these motor parks. Need is being met by use of temporary motor park facilities located 3½ miles distant which have deteriorated to the extent that demolition is necessary. Existing hardstands were graded without application of stabilization materials. As a result, blowing sand and dust are causing deterioration and wear of motorized equipment. Should construction be deferred, assigned training mission will continue to be delayed.

MOTOR PARK FACILITIES

The next item is motor park facilities for 6 battalion motor parks, $226,000.

This facility is required for servicing vehicles assigned six battalions. Need is being met by using temporary motor park facilities located 3½ miles distant which have deteriorated to the extent that demolition is necessary. Use of the hardstand areas are undesirable because they are not paved. As a result, desert sand and dust causes deterioration and wear of motorized equipment. Deferral of this project will adversely affect the training mission and limit the supporting facilities of the motor repair shops.

BATTALION CLASSROOM BUILDINGS

The next item is 24 battalion classroom buildings, $1,243,000.

These classrooms are required to support 12,029 permanent troop spaces built with prior funds for presentation of highly technical and specialized instructions by means of motion pictures and lectures. No classrooms exist nor are there other facilities that can be used for

this purpose. Classroom subjects are not presented in the open where "paperwork" is difficult and where retention of the interest and attention of troops is greatly hampered by passing traffic and other local distractions. This lack of attention results in a greatly impeded training program and a consequent increase in cost. Outdoor sessions are frequently prevented by inclement weather which makes adherence to established training schedules impossible. Deferment of this project will result in continued delay in accomplishing the assigned training program as well as higher training costs.

FAMILY HOUSING

In addition, we are asking for 250 family quarters for noncommissioned officers at Fort Bliss, $3,213,000. The total requirement at Fort Bliss is 7,025. There exists now 1,080 permanent type units, of which 800 are Wherry units. This leaves a deficiency of 5,945 units. I would like to state that this entire request will be a replacement for temporary substandard quarters which now have people living in them.

Mr. RILEY. Where is Fort Bliss located?

Colonel SHULER. It is located 5 miles northeast of El Paso, Tex.

Mr. RILEY. El Paso is a good sized city, is it not?

Colonel SHULER. Yes.

Mr. RILEY. Does the community give you pretty good support in the way of housing, recreation facilities, and schools? Do they assist you in any of those things?

Colonel SHULER. Yes, sir. At present we are using 1,351 sets of community quarters. I mentioned in my testimony before the full subcommittee that we had completely surveyed all of our stations within the last 6 months, and the data I am presenting in justification of family housing is based on this latest survey, and we do take into account the community assets in our family housing picture. El Paso does give Fort Bliss very fine support, sir.

Mr. RILEY. Is the housing that they furnish reasonably priced?

Colonel SHULER. It is reasonably priced for those people who can afford to pay the various rentals. I would like to point out that for a corporal with 7 years of service who gets slightly over $70 a month for his rental allowance, it is difficult for him to find decent quarters for that rental.

Mr. RILEY. You do not have 3- or 4-bedroom houses renting for $50 or $60 a month?

Colonel SHULER. No, sir.

Mr. RILEY. The family housing at Fort Bliss, is that one of the items that was deferred last year?

Colonel SHULER. No, sir; it is not.

FORT HOOD, TEX.

The next station is Fort Hood, Tex., which is located 1 mile west of Killeen, Tex. The list of items we are requesting funds for are: 8 enlisted men's barracks; 2 motor repair shops for 2 battalion motor parks; motor-park facilities for 2 battalion motor parks; 4 battalion headquarters buildings; officers open-mess and swimming pool facilities; noncommissioned officers open mess and swimming pool; aircraft

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paint shop; 2 branch post exchanges; 2 regimental dispensaries, regimental chapel; and 8 battalion classroom buildings.

ENLISTED MEN BARRACKS

The first item is 8 enlisted men barracks, $4,888,000. This project is required to provide permanent housing for enlisted men presently assigned to temporary barracks. There is a requirement for 21,715 permanent spaces. The immediate projected mission of this armored training post (2 armored divisions and corps headquarters) requires housing enlisted personnel in existing temporary barracks converted to 4 family apartments in 1945. These 148 buildings were declared substandard and placed on standby basis during 1952; concentration of troops at Fort Hood has necessitated the restoration of this family housing for troop housing. Restoration included only minimum addition to latrine facilities and not reconversion to barracks.

MOTOR REPAIR SHOPS

The next item is 2 motor-repair shops for the 2 battalion motor parks, $492,000. These shops are required for organizational maintenance of 516 varied type tactical vehicles assigned to armored battalions. There are no maintenance shops existing of any type for this purpose. Troops are performing vehicle maintenance under field conditions in open areas without shops, wash platforms, grease and inspection racks, and surfaced hardstand areas. Deferment of this project will continue maintenance of these vehicles under field conditions and prevent proper troop training in organizational vehicle maintenance.

MOTOR PARK FACILITIES

The next item is motor park facilities for 2 battalion motor parks, $107,000. These facilities are required to service 516 organization tactical vehicles assigned to 2 armored battalions. There are no existing facilities to meet this requirement, and vehicle maintenance is being conducted under field conditions in open areas approximately 1,200 feet from the new areas.

BATTALION HEADQUARTERS BUILDINGS

The next item is 4 battalion headquarters buildings, $136,000. This project is required for accomplishment of administrative, command, and supply functions of 4 battalions to which are assigned 2,350 military personnel to be housed in permanent barracks now under construction and 460 military personnel housed in permanent barracks constructed from fiscal year 1952–54. Eight of the fiscal year 1955 barracks are sited in a new area with no existing structures of any type. Deferment of this project will necessitate utilization of barracks space for battalion headquarters.

OFFICERS OPEN MESS AND SWIMMING POOL FACILITIES

The next item is officers' open mess and swimming pool facilities, $465,000. This project is required to provide messing and recreational facilities for 2,526 permanently assigned officers. Existing

temporary open-mess building contains only 19,493 square feet, is of wooden construction, and provides only 60 percent of the area needed. Due to age and temporary standard of construction, it is not deemed practical to expand the present facility. Due to the isolated location of Fort Hood, recreational and welfare facilities must be provided on post. It is proposed to continue utilization of temporary facility during the interim to supplement subject unit in order to accommodate assigned interim personnel. The site for the permanent officers' mess is proposed adjacent to the existing officers' swimming pool. Deferment of the project will necessitate continued use of a temporary facility on an overcrowded basis. This project also includes a filter plant and bathhouse to replace the existing facilities in order to comply with TB Med 163, Sanitary Control of Army Swimming Pools.

NCO OPEN MESS AND SWIMMING POOL

The next item is a noncommissioned officers mess and swimming pool, $515,000. This project is required to provide messing and recreational facilities for 8,973 noncommissioned personnel. Existing structure (building 325) contains 27,197 square feet, is of wartime temporary construction and provides most limited functional areas, namely: dining facilities are only snack-bar type; recreational area for only one-fourth of membership; no reading room, and no library area. Isolated location of training post requires provision on post of welfare, morale, and recreational facilities. Complete alteration and additions to existing noncommissioned officers mess is not considered practical since contract estimates exceed $165,000 for wooden construction. Interim strength can be served by both facilities. Deferment of project will necessitate continued use of temporary facility on an overcrowded basis with its resultant detrimental effect on morale. The project includes swimming pool with bathhouse (to comply with TB MED 163, Sanitary Control of Army Swimming Pools). The site is adjacent to the noncommissioned family housing area between Safi Road and 37th Street south of Headquarters Avenue.

AIRCRAFT PAINT SHOP

The next item is an aircraft paint shop, $84,000. This project is required to provide shop facilities for painting 62 aircraft assigned to units at this installation. No facilities exist to accomplish this painting. The 62 Army aircraft which are organic to an armored division and Cargo Helicopter Co. include 14 L–19's, 4 L–20's, 16 H–23's, 7 H–19's and 21 H–16's. Interim requirements, in addition to permanent, include 39 aircraft for an armored division and 6 aircraft for corps headquarters composed of 2 L–19's, 1 L–23, 2 L–20's, and 1 helicopter rotary wing. Current requirements, in addition to the above, include transportation Army aircraft maintenance applicable to the Fourth Army area. Painting is presently performed in an open area adjacent to existing maintenance hangar, and is extremely unsatisfactory and difficult due to weather conditions and clouds of dust generated from tank traffic on trails in proximity to the airfield. Deferment of the project will preclude the proper performance of this mission.

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BRANCH POST EXCHANGES

The next item is 2 branch post exchanges, $119,000. This project is required to provide exchange facilities to serve 7,824 troops who will be housed in 24 permanent barracks upon completion of the fiscal year 1955 MCA program. There are no buildings to meet this requirement. Deferment of this project will require troops to utilize a 7,200 square foot temporary branch exchange located approximately one-third mile distant. Other temporary exchanges are located one-half mile from the new barracks area.

REGIMENTAL DISPENSARIES

The next item is 2 regimental dispensaries, $199,000. This project is required to serve 7,824 troops who will be housed in 24 permanent barracks upon completion of the fiscal year 1955 MCA program. The nearest dispensary is located one-half mile from the new barracks area. This mobilization-type dispensary which serves 2,600 men housed in temporary converted barracks was constructed during World War II with an area of 2,100 square feet. Limitation of this dispensary prevents utilization by enlisted men to be housed in the new barracks area. Enlisted men already assigned to this new area must be transported to other medical facilities for treatment.

REGIMENTAL CHAPEL

The next item is a regimental chapel, $149,000. This project is required for religious worship for 3,055 enlisted men housed in permanent barracks constructed in fiscal years 1952–55. No existing facility is within this area. The nearest chapel (CH–1, 300-seat, temporary type) located 4,450 feet from this barracks area, serving 4,129 enlisted men in existing troop housing, is inadequate to accommodate additional personnel. If the project is deferred, no such facility will be available for troops housed in the new area.

BATTALION CLASSROOM BUILDINGS

The next item is 8 battalion classroom buildings, $387,000. These buildings are required to provide classroom training for 7,824 troops to be housed in 24 permanent barracks upon completion of the fiscal year 1955 MCA program. Eight of these barracks, housing 2,172 enlisted men during the interim, and 1,880 enlisted men of the peacetime complement, are in a new area without such facilities. Four of the classrooms are to be sited in the new area; the remaining four classrooms are to provide urgently needed facilities for permanent barracks in existing temporary troop areas without classrooms. All existing temporary structures are occupied for other troop training and administrative functions. Deferral of this project retards the training of enlisted personnel and extends the training time lag between units of the armored division.

FAMILY HOUSING

We are also requesting funds for 793 sets of family quarters, $10,390,000.

That is broken down, Mr. Chairman, 393 are to be funded against unfunded authorization still existing in last year's family housing law, and the remainder are to be funded against new authorizations we are requesting in this bill. Breaking this down, against last year's authorization there are 249 noncommissioned officers' quarters; 136 company grade; and 8 field grade; and then there is a site preparation and utility item added to that.

Against the new authorization, there are 300 noncommissioned officers units; 90 company grade; and 10 field grade.

The total requirement at Fort Hood is 7,367. There exists 979 adequate units, of which 500 are Wherry units, leaving a deficit of 6,388.

Mr. RILEY. How large is the city near Fort Hood?

Mr. FOSTER. The city of Killeen had a population of between 10,000 and 12,000 in 1954.

Mr. RILEY. There are no large cities in the area?

Colonel SHULER. That is right. We are presently using 4,051 houses in the community of Killeen.

FORT SAM HOUSTON, TEX.

The next station is Fort Sam Houston, Tex. We have two items requested here, Mr. Chairman. One is the Army Command and Administrative Network radio transmitter station, $143,000 and the other is two bachelor officers' quarters, $662,000.

Mr. MILLER. Off the record.

(Discussion off the record.)

ACAN RADIO TRANSMITTER STATION

Colonel SHULER. The first item is the Army Command and Administrative Network radio transmitter station. The existing station is located within Fort Sam Houston. It contains a permanent transmitter building, 2,805 square feet, built in 1934, which is in good condition, and which will be converted in the future to 2 noncommissioned officer family quarters. New standards for rhombic antennas for the present 4 circuits plus the 5 additional circuits emanating from Headquarters, Fourth Army (requested by the Department of the Army) make the existing location inadequate since an area of only 900 feet in diameter is available and existing surrounding buildings, including Wherry housing, prevent expansion. An antenna area 1 mile in diameter is required to contain the rhombic antennas, each of which requires a space 400 feet by 1,200 feet, and must be orientated directionally. The proximity (9,700 feet) to the existing radio receiving station is objectionable. Current commercial practice is a 25-mile separation and is observed at other Department of the Army stations.

Mr. MILLER. Off the record.

(Discussion off the record.)

Mr. FOSTER. Each Army has a communications station which receives messages from outside the Army area and transmits them to the subordinate installations. This is the Fourth Army station.

Mr. MILLER. This is the Fourth Army's principal station?

Mr. FOSTER. Yes.

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Mr. RILEY. Is this a part of your worldwide system?

Mr. FOSTER. It is worldwide in that through intermediate stations this station can communicate with any other Army station in the world.

Mr. RILEY. They have a certain wave length so that they do not interfere with other people?

Mr. FOSTER. Yes. They also use leased lines and telecommunication systems.

Mr. RILEY. Does the Air Force have a separate communications system from the Army?

Mr. FOSTER. They do, sir, for their command communications. I am not certain of this, but I believe the Air Force administrative traffic is partially carried over the Army's administrative network.

Mr. RILEY. The Navy also has a system, does it not?

Colonel SHULER. Yes.

Mr. RILEY. I believe there is some exchange of facilities?

Colonel SHULER. Yes; but each has its own network for that particular traffic which must be handled by the service involved.

Mr. RILEY. So that if anything happened to one communication system we would still have something to go on?

Colonel SHULER. Yes, sir.

Mr. RILEY. So that in that respect it is a useful measure as well as to the service using it?

Colonel SHULER. Yes.

BACHELOR OFFICER QUARTERS

Two bachelor officer quarters are required to provide quarters for 120 bachelor officers. There are 6 existing permanent bachelor officers quarters, with capacities of 24, 34, 8, 39, 16, and 2, totaling 123 spaces, built from 1886 to 1930, being maintained in satisfactory condition and these will be retained. There are 9 existing mobilization-type bachelor officers quarters, and the capacity of 7 is 35 each, 2 have 43 each, totaling 331 spaces. These were built in 1941, are in good condition and will be retained as long as the demand exists. The peacetime requirement of 324 spaces minus 123 existing spaces equals 201 permanent spaces required. Currently bachelor officers are being housed in the 9 temporary buildings and in dormitory-type accommodations in 63-man mobilization barracks. This is not conducive to study and preparation of daily assignments by student officers, which affect adversely troop morale and training effectiveness.

FORT SILL, OKLA.

The next station is Fort Sill, Okla., which is located 4 miles north of Lawton, Okla. The list of line items comprises 2 motor-repair shops for 2 battalion motor parks; motor park facilities for 2 battalion motor parks; hardstands for 2 battalion motor parks; a branch post exchange; a regimental dispensary; a regimental chapel; and a land acquisition item.

This station was initially occupied in 1871.

MOTOR REPAIR SHOPS

The first item is 2 motor repair shops for 2 battalion motor parks, $243,000. This project is an urgent operational requirement to provide facilities for the maintenance and repair of TO&E assigned vehicles for artillery battalion and to maintain integrity in operation and training. Vehicles range in number from 182 to 290 per battalion depending upon the type battalion assigned. Approximately 65 percent of these vehicles will be of the fuel consuming type and a portion weapons up to and including the 280-millimeter gun. Construction of these two motor repair shops is vitally necessary to provide the remaining motor replacement facilities for this new troop area. The existing and presently funded motor repair shops are: 124,918 square feet constructed from 1934 to present date: mobilization, 75,720 square feet constructed in 1942; and emergency, 15,736 square feet constructed in 1943. All existing motor repair shops are fully utilized, are in fair to good condition, but located approximately ½ mile distant from this new troop area. Upon completion of this project the existing motor repair shops will continue to be fully utilized. No existing structures will be relocated. Postponement of this project will result in two artillery battalions in the new troop area not having motor repair facilities available to meet their operational requirement for maintenance of equipment and training of military personnel.

MOTOR-PARK FACILITIES

Motor park facilities for 2 battalion motor parks, $58,000, are an urgent operational requirement to provide supporting companion facility for 2 battalion motor parks proposed in this program. These facilities are required for maintenance and repair of T/O & E assigned vehicles which range in number from 182 to 290 vehicles per battalion depending upon the type of battalion. Approximately 65 percent of these vehicles will be fuel-consuming type and a portion weapons up to and including the 280-millimeter gun. Existing similar facilities are of both mobilization and permanent types built in periods ranging from 1934 to 1943. Facilities are fully utilized, but located approximately one-half mile from this new troop area. Postponement of the project will result in two artillery battalions not having required operational motor-park facilities available for the maintenance of equipment and training of troops. No existing structures will be relocated.

HARDSTANDS

Hardstands for 2 battalion motor parks, $215,000, are an urgent operational requirement to provide service drives and parking for T/O & E assigned vehicles for 2 battalion motor parks. Construction of these 2 battalion hardstand areas is vitally necessary to provide operational facilities for troop units to be assigned to new area; 182 to 290 vehicles are assigned to a battalion, depending on type of battalion. Approximately 65 percent of the vehicles will be fuel-consuming types and a portion of the weapons up to and including 280-millimeter guns. Hardstands must provide area for conducting outdoor classes on weapons assigned to units and for parking of same within motor-park areas. The existing motor-park hardstand areas are permanent

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and mobilization type as follows: Concrete, 5,933 square yards; asphalt, 144,041 square yards; crushed rock, 269,196 square yards. The existing hardstands have been constructed from 1934 to the present date. All are in good condition and fully utilized, but located approximately one-half mile distant from this new troop area. Upon construction of the project, existing hardstand areas will continue to be fully utilized. Postponement of this project will result in two artillery battalions not having operational motor facilities available for maintenance of assigned equipment and training of troops. No existing structures will be removed.

BRANCH POST EXCHANGE

The next item is a branch post exchange, $64,000.

Mr. RILEY. What is the necessity for that?

Colonel SHULER. This project, sir, is required as an exchange facility for 4,000 enlisted men now housed in a new troop area recently constructed at this installation, and to make available to these enlisted personnel merchandise and services of necessity and convenience. The present facilities in this new troop area are limited and the location is in one of new barracks using space needed for troop housing. This temporary expedient is utilizing the entire kitchen and dining hall, and 24 troop housing spaces. Existing branch exchanges consist of 2 permanent buildings constructed in 1932 and 1941—1 at 5,787 square feet will require replacement in long-range future—and the remainder temporary buildings, constructed in 1941. All are in fair condition but located in widely separated areas, each serving troops housed in other parts of the installation. The nearest branch exchange is a temporary building fully utilized by other troops and is located approximately one-half mile from the new troop area. The project will not require relocation of any existing buildings. Postponement of the project denies troops housed in the new troop area adequate exchange facilities which will have an adverse effect on morale of enlisted personnel and delay return of barracks space to use for troop housing.

Mr. RILEY. It is a new section at Fort Sill?

Colonel SHULER. That is right.

REGIMENTAL DISPENSARY

The next item is a regimental dispensary, $105,000. This project is required to provide facilities for medical treatment—examination and treatment of ambulatory patients, first aid, physical examination, inspection, and immunizations—to 4,000 enlisted personnel housed in the new troop area recently constructed at this installation. The present dispensary facilities in this area are limited—1,800 square feet—and located in a new barracks, occupying 15 spaces needed for troop housing. The existing dispensary consists of 2 permanent buildings containing 8,116 square feet, constructed from 1909 to 1934. Only 1 of these dispensaries—2,872 square feet—is properly located to serve the permanent troop housing. The remaining dispensaries are temporary buildings constructed in 1941. All are in fair condition but located in widely separated areas, each serving troops in other parts of the installation. The nearest dispensary, a temporary

building fully utilized by other troops, is located approximately one-half mile from this new area. The project will not require relocation of any existing buildings. Postponement of this project denies troops housed in the new area adequate medical service except by diversion of barracks spaces or overcrowding existing dispensaries in other parts of the installation, which will have an adverse effect on the morale of enlisted personnel and delay return of barracks spaces to their intended use for troop housing.

REGIMENTAL CHAPEL

The next item is a regimental chapel, $152,000. This project is required to provide religious facilities for 4,000 enlisted personnel now housed in new troop area recently constructed at this installation. The chapel is required for formal religious services, private prayer, meditation, and character guidance. The chapel facilities now serving the troops in this new area are limited and marginal, using the lounge and 41 spaces in one of the new barracks required for troop housing. The existing regimental chapels are six nonpermanent buildings constructed in 1941 and located in widely separated areas each serving troop housing in other parts of the installation. The nearest chapel, a temporary building fully utilized by other troops, is approximately one-half mile from this new troop area. Attempts to transport troops to existing chapels in other localities will result in overcrowding and discourage attendance at religious services. The project will require relocation of a small temporary gas station. Postponement of the project denies troops housed in the area adequate facilities for religious devotions and related activities, and requires these activities to be continued in a barracks building. This temporary expedient has an adverse effect on the morale of troops and on the accomplishment requirement of chaplains.

LAND ACQUISITION (AREAS 2 AND 3)

Mr. Chairman, the next item is the land-acquisition item at Fort Sill, Okla., $2,216,000.

Mr. MILLER. Is that the item discussed before the full subcommittee?

Colonel SHULER. That is right, that is the item I discussed previously.

Mr. RILEY. That has been covered pretty thoroughly.

Colonel SHULER. Yes, sir. The reservation is the same area utilized during World War II and only slightly larger than it was in 1934. The 280 millimeter guns and 762 millimeter rocket, that is, the Honest John, can now only be fired over populated areas of the installation, highways, and railroads.

This project includes the acquisition of 31,020 acres of land. Area 2 includes 10,700 acres of rugged mountain terrain located in the Wichita Mountains Wildlife Refuge. This 10,700 acres is a part of the 30,544 acres of land now utilized in the Wichita Wildlife Refuge by a restricted special-use permit. The remainder, 20,320 acres, is privately owned land which can be acquired in fee at an estimated average cost of $109 per acre.

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With your permission, I would like to have Lt. Col. R. Pennel of G–3 give us a short briefing to acquaint the committee with the situation at Fort Sill. He has a map he will use in his briefing.

Mr. RILEY. We will be glad to hear from Colonel Pennel, and I would like him to advise the committee whether or not you have sufficient land for increased range in the event of further improvements and developments in your weapons in the future.

Colonel PENNEL. To answer your question—first, that can only be determined by future developments. This will meet our current known requirements.

Mr. RILEY. Is there more land available, and will an extension of your needs, should they come, be an expensive proposition or would it be better to acquire some additional land at this time so that you will be fully protected?

Colonel SHULER. May I address myself to that question, Mr. Chairman?

Mr. RILEY. Yes.

Colonel SHULER. This requested acquisition, sir; is necessary, as Colonel Pennel has pointed out, to allow us, as he will point out further in his briefing, to more efficiently fire the weapons now used at Fort Sill which require this longer range. As to any future artillery developments, which we all admit are bound to come, we believe we can fire them, although some will have to be fired at reduced ranges. As to whether in some distant future we might have to expand Fort Sill or take some of this activity to another area, I cannot answer.

Mr. RILEY. Colonel, my thought was this: Often we run into problems of this nature where you have not anticipated your future needs and we have had to pay excessive prices because other people had anticipated them. If this land does not cost too much I think you ought to partially, at least, anticipate your needs. Congress is rather allergic, as you know, to any more land acquisitions.

Colonel SHULER. I think as Colonel Pennel conducts his briefing the committee will see why we have limited our request as to the Wichita Wildlife Refuge to what we have. On the remainder we could possibly expand more but the cost of the land in any other expansible direction is such that we feel we should hold it to what we have, and we believe it will fill our needs for the foreseeable future.

Colonel PENNEL. The Fort Sill training area comprises approximately 74,000 acres. The reservation is bisected by United States Highway No. 277, which is paralleled by both the Frisco and Rock Island railroads. The Frisco railroad cuts across the northeast corner of the reservation. On the south is United States Highway No. 62.

Lawton, a city of approximately 50,000, is here. This is the small town of Cache, and this is the small town of Indiahoma. This is Medicine Park, a very popular resort [indicating on map].

The reservation is divided into a 60–40 ratio, 60 percent in the west range and 40 percent in the east range. To augment this reservation we would like to acquire two segments. Area 2 is a portion of the Wichita Wildlife Refuge and area 3 is private land.

Fort Sill was established in 1911 as an artillery school. In those days 12,000 yards was generally the maximum range requirement. This range sufficed until World War II. The heaviest weapon at that time required a 12,000-yard range.

With the advent of World War II greater emphasis was placed on medium and heavy artillery with ranges up to 25,000 yards. Training was necessarily conducted at reduced ranges at the expense of proficiency in training.

Today we have the 280-millimeter gun and the 762-millimeter rocket which require still greater ranges. I will relate some of these range characteristics to ranges available.

With the 155-millimeter gun with a 27,000-yard range it can fire from here into this impact area outlined in green at 11,000 yards, or it can fire into this impact area which is 21,000 yards, or it can fire from here to here [indicating]. In each instance it involves firing across the post proper, except for a very limited sector, and the highways and railroads. When they are fired it requires clearance with the highway authorities, the railroads, and the Civil Aeronautics Authority.

At present the majority of firing is with 105 millimeter and 155 millimeter howitzers. The problem is not serious from the point of range but it is from the point of saturation. When we approach the longer range weapons, it is a more serious problem. With the 280 millimeter gun the same impact areas must be used as with the 155 millimeter gun from here, or from this area into here (indicating). Again it is a reduced range and the training is unrealistic.

Firing an Honest John, the 762 millimeter rocket, for safety reasons it can be fired only from this area into this impact area (indicating). The reason is that the rounds have a large dispersion factor, there is fallout from the propellant, and therefore, for safety reasons, it cannot be moved around and fired.

Mr. MILLER. What is the longest range you have available as of now?

Colonel PENNEL. About 21,000 yards fired over the highways, the railroads, and the post.

Mr. MILLER. And that involves firing not only over the highways but the mainpart of your post, both densely populated areas?

Colonel PENNEL. Yes, sir.

Mr. MILLER. And even if you are shooting without any heavy explosives, any slipup might result in serious damage?

Colonel PENNEL. Yes.

Mr. MILLER. Go ahead.

Colonel PENNEL. I have shown that the ranges are inadequate. I will now show why the acquisition is needed from the point of congestion.

The training conducted at the Artillery School at Fort Sill requires 180 fire exercises a week and 80 nonfiring exercises a week. This is an average of about 40 firing exercises a day. The impact position areas are so saturated that there is no room for any maneuvers of any type.

A number of plans were considered for Fort Sill expansion, and it was finally determined that the one which would most satisfactorily meet the requirements was the acquisition of areas 2 and 3.

Area 2 comprises 10,700 acres located in the Wichita Wildlife Refuge. As you see, the southern portion is very poor land having little use except for pasture. The rock crops out all over the area. There are no recreational facilities in this area. The lakes, Medicine Park, are all outside this area so it would impose no serious hardship on people seeking recreation.

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Area 3 includes 20,320 acres which are mostly grazing land with some crops. It is privately owned. We have excluded Cache, but must include Craterville Park.

It has been proposed by the landowners that we acquire the entire refuge. It would provide an additional impact area but it would not be particularly useful. We need a flat area flanked by mountains for observation. In addition, there would be opposition on a national basis.

Mr. MILLER. If you get the land requested, what will be your maximum range without firing over the road?

Colonel PENNEL. Approximately 30,000 yards.

Mr. MILLER. And that would give you up to your maximum range?

Colonel PENNEL. Yes.

Mr. RILEY. What type of land is that to the west?

Colonel PENNEL. Grazing land.

Mr. RILEY. Any cultivated lands?

Colonel PENNEL. Not predominantly.

Mr. RILEY. What do you propose to do with the land east of the highway?

Colonel PENNEL. This area [indicating]?

Mr. RILEY. Yes.

Colonel PENNEL. It will continue to be used for impact areas and maneuver areas.

Mr. RILEY. I thought you wanted to eliminate the shooting over the highway.

Colonel PENNEL. We can fire from positions in here (indicating).

Colonel SHULER. In addition they can fire from the western side of the road over narrow corridors.

I can give you the student load. There are 1,250 officers and 1,250 enlisted men the year around there undergoing this very rigorous training including firing exercises and working out the various tactics of artillery.

Mr. RILEY. I was in hope we could eliminate that altogether since you tell me you have an air corridor and two railroads and a highway.

Colonel SHULER. The commandant of the school at Fort Sill testified at considerable length on this project before the House Armed Services Committee and he made quite a point of what I have stated, that he absolutely could not give that up because if he did he could not conduct the required schedule at the school. The thing this increased range gives them is that it allows them to fire their weapons closer to the maximum range of the weapon.

Besides the training, the Continental Army Command Board field-tests all these weapons there. So in addition to the training of the men, there is that very important mission to the Army.

Mr. RILEY. I am heartily in favor of the program Colonel. I just do not want to take 2 or 3 bites at the same area.

Colonel SHULER. Naturally, on any project I cannot assure the committee we would never need any more land, but I can assure you that for the foreseeable future this is it. We will not be in next year for another land acquisition item at Fort Sill.

Mr. RILEY. Would it be a practical proposition to dispose of the land east of the road and purchase additional land westward?

Colonel SHULER. I have been told by General Williams that it would not, and I am told the land to the west is considerably more expensive.

Mr. MILLER. I would imagine if you disposed of it you would get very little for it.

Colonel SHULER. As an impact area it is contaminated. You could clear it for above-ground use, but you could never assure yourself the duds were clear under the ground.

Mr. FOSTER. I think it should be made plain that those two impact areas to the east will still be continued in full use.

Mr. MILLER. I assume that there is a good deal of that training where range is unimportant?

Colonel SHULER. That is right.

Colonel PENNEL. This acquisition will not only give us longer range but an additional impact area.

Mr. RILEY. Thank you very much, Colonel.

Did you have any more questions for Fort Sill?

Mr. MILLER. Off the record.

(Discussion off the record.)

Mr. FOSTER. Mr. Chairman, the record might show that the two legislative committees heard all opponents to this acquisition in full detail and a full record was built up as far as their claims are concerned.

Mr. RILEY. That is, the local landowners?

Colonel SHULER. Yes; and the people involved in the Wildlife Refuge. They were fully heard. They were heard almost a full day before each of the legislative committees.

Mr. MILLER. Is the Wildlife Refuge under Federal control?

Colonel SHULER. That is right.

Mr. MILLER. Not State control?

Colonel SHULER. No, sir, the Department of the Interior.

FIFTH ARMY FACILITIES

FORT CARSON, COLO.

Colonel SHULER. The next station, which is in the Fifth Army, is Fort Carson, Colo.

The list of items at Fort Carson comprises a post headquarters building; 2 ammunition igloos; 6 enlisted men's barracks; 2 battalion headquarters buildings; 2 battalion classroom buildings; 4 motor repair shops, a hardstand for a regimental motor park; motor park facilities for the regimental motor park; relocation of 35 existing buildings; a regimental dispensary; a branch post exchange; concrete aprons; an enlisted men's service club; and family housing. Then at Camp Hale, which is located about 100 miles from Camp Carson and which is a substation of Camp Carson, 2 enlisted men's barracks; 1 infirmary; 6 enlisted men's messes; 3 latrines; and the final item is 6 company administration and classroom buildings.

These items at Camp Hale are not permanent structures but modified emergency structures, since Camp Hale is not a permanent station.

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POST HEADQUARTERS BUILDING

The first item is a post headquarters building, $686,000. This project is required to provide facilities for consolidated administration and command functions. Post headquarters activities should be centralized to eliminate time consumed traveling between various buildings in various locations. No post headquarters exist, but the hospital, a mob-type administration building, and 3 other buildings approximately 1 mile apart are now used for this purpose. Hospital administration functions are being accomplished in the receiving and disposition building. The functions of the latter are being accomplished in a former hospital ward which is not needed for patients. The hospital administration building will revert to hospital use after construction of this project. The proposed project will be located on a site now occupied by 22 temporary buildings which are in sufficiently good condition for relocation and retention for mobilization requirements.

AMMUNITION IGLOOS

The next item is 2 ammunition igloos, $97,000. These igloos are required for the storage of packaged artillery ammunition now stored in the open and exposed to the weather. Existing facilities consist of 13 nonpermanent steel-arch magazines varying in size from 200 to 800 square feet. These magazines are filled to capacity. Their capacity totals 8,600 square feet, whereas 13,250 square feet are required; 30,000 cubic feet (4,650 square feet) of ammunition are now stored in the open. Due to allowances required for aisle space and air circulation, 5,812 square feet of actual igloo area are required for the 4,650 square feet of ammunition. If the project is deferred, ammunition will continue to be stored in the open, increasing deterioration of ammunition. Existing facilities will continue in use for ammunition storage.

ENLISTED MEN'S BARRACKS

The next item is 6 enlisted men's barracks, $3,718,000. This project is required to house a portion of the enlisted men at Fort Carson in permanent barracks. Although this installation has a requirement based on peacetime strength for 19,181 permanent spaces, none now exist except for 1,578 spaces which are under construction. Enlisted personnel are presently housed in temporary barracks which are in relatively good condition structurally, but do not provide privacy, space for comfortable living, and recreational facilities of permanent barracks. The proposed barracks will be located in a site now occupied by various type temporary buildings. As a result, these temporary buildings will be relocated and retained for mobilization requirements.

BATTALION HEADQUARTERS BUILDINGS

The next item is 2 battalion headquarters buildings, $79,000. This project is required to provide facilities for administrative, supply, and command functions of two combat battalions, and to support the permanent enlisted men's barracks under construction. There are no existing permanent type buildings suitable for use as battalion

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headquarters. Temporary type battalion headquarters exist but are required to support temporary type enlisted men's barracks. Existing facilities will be retained to meet permanent requirement deficiency as well as interim needs.

BATTALION CLASSROOM BUILDINGS

The next item is 2 battalion classroom buildings, $109,000. This project is required to provide training and educational facilities for troops of two combat battalions which will be housed in permanent barracks now under construction. Current training programs require indoor study and classroom work in addition to field training. There are no existing permanent buildings suitable for use as classrooms.) Deferral of proposed project will necessitate utilization of barracks space for classrooms.

MOTOR REPAIR SHOPS

The next item is 4 motor repair shops, $268,000. These proposed shops are required for the maintenance and repair of 529 vehicles (333 wheeled motor vehicles, 25 tracked combat vehicles and 171 towed trailers) of an infantry regiment, units of which will occupy the barracks under construction and those in this program. There are no similar existing facilities in the new regimental area. Existing temporary type facilities are located in other regimental areas which they serve. Deferral of this project will necessitate maintenance of these organizational vehicles by joint use of facilities in other regimental areas, resulting in considerable backlog of repair work and interruption of the trailing program. Existing facilities will continue in their present use.

HARDSTAND FOR REGIMENTAL MOTOR PARK

The next item is a hardstand for the regimental motor park, $127,000. The hardstand is required to provide a hard surfaced area for parking and miscellaneous servicing (when weather permits) for 529 vehicles (333 wheeled vehicles, 25 tracked combat vehicles and 171 towed trailers) assigned to the regiment. Hardstand does not exist in the area where shops to be supported will be located. Deferral of this project will necessitate parking vehicles in an unpaved area which will cause an increase in maintenance and repair.

MOTOR PARK FACILITIES FOR REGIMENTAL MOTOR PARK

The next item is motor park facilities for the regimental motorpark, $68,000. The proposed facilities are required for the support of the 4 shops in this program and for servicing 529 vehicles (333 wheeled motor vehicles, 25 tracked combat vehicles and 171 towed trailers) of the regiment whose units will occupy the barracks under construction and those in this program. No similar facilities exist in the new area. Existing temporary facilities are located in other regimental areas which they serve. Deferral of this project will necessitate the servicing of the vehicles being accomplished in the open or under tentage.

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RELOCATION OF 35 EXISTING BUILDINGS

The next item is the relocation of 35 existing buildings, $154,000. The relocation of the above buildings is necessary to provide a site for the motor park facilities in this program. The buildings will continue in use and be available for the installations' interim and mobilization missions. New location will be adjacent to existing utilities. The buildings to be moved are in good condition and will continue in use as barracks, messes and company administration buildings. Relocation of the buildings is necessary due to the fact that the installation's permanent development plan is based on utilization of a portion of the existing road and utility system.

REGIMENTAL DISPENSARY

The next item is a regimental dispensary, $104,000. This dispensary is required for medical treatment and care of approximately 4,000 military personnel to be assigned to the enlisted men's barracks now under construction and in this program (line item 36). No such facilities exist for this new regimental area. If this project is deferred it will be necessary that space be provided in temporary buildings by conversion for this purpose. Existing dispensaries are temporary and located in other regimental areas. They will continue in this use indefinitely.

BRANCH POST EXCHANGE

The next item is a branch post exchange, $72,000. Tl is branch exchange is required to permit approximately 4,000 military personnel who will occupy the barracks now under construction and others in this program to purchase merchandise without inconvenience. No such facilities exist in this new regimental area. Existing facilities are temporary and located in regimental areas of other locations. If this project is deferred, an existing temporary building will have to be converted for this purpose. No existing facilities will be demolished or relocated.

CONCRETE APRONS

The next item is concrete aprons, $350,000. Concrete aprons are required adjacent to the hangar which is now under construction, for engine warmup and parking for 27 fixed-wing aircraft and 16 helicopters. Lighting is required to permit fueling and servicing of aircraft at night and water is required for washing and fire fighting purposes. None of these facilities exist at present.

ENLISTED MEN'S SERVICE CLUB

The next item is the enlisted men's service club, $502,000. This project is required to provide recreational facilities for enlisted personnel at this station, and to relieve overcrowding of existing facilities. In view of the relative isolation of installation, recreational facilities are essential for maintaining morale desired. Two mob-type service clubs of 21,229 square feet exist, and are structurally sound, but they cannot accommodate the enlisted personnel entitled to use these facilities. If the project is deferred, limitations in existing clubs will have an adverse effect on the morale of the troops.

ENLISTED MEN'S BARRACKS

The next item is two enlisted men's barracks at Camp Hale, $165,000. No enlisted men's housing exists at this installation, but one 80-man enlisted men's type has been approved in the fiscal year 1955 MCA program. The troops on periodic training are housed in Jamesway huts or squad tents. These quarters are suitable for these troops since they are moved to Camp Hale for only short periods of time. These barracks are required, however, for overhead personnel who are assigned to the installation for extended periods.

INFIRMARY

The next item at Camp Hale is an infirmary $235,000. This project is required for the medical treatment and care of approximately 5,000 military personnel. No infirmaries or dispensaries exist at Camp Hale. Medical facilities have been established in Jamesway huts but are limited to the type of treatment. Military personnel requiring surgery or other major treatment must be transported to Camp Carson, 100 miles distant or a civilian hospital approximately 50 miles distant if conditions require it. Training schedules require the use of this camp at various times throughout the year. In view of the strenuous training conducted at Camp Hale, such as mountain and cold weather training casualties, are usually higher than at other installations. Deferment of this project will have an adverse effect on the morale of all military personnel undergoing training.

ENLISTED MEN'S MESSES

The next item at Camp Hale is 6 enlisted men's messes. $420,000. The messes existing or planned for early construction with M. and O. funds consist of 6 T/O type totaling 16,880 square feet, 11 metal prefab-type totaling 21,120 square feet, and 2 totaling 5,920 square feet in the fiscal year 1955 MCA program. These units are sufficient for 18 company messes and the station complement or 3,800 troops. The requirement for additional messes is based on a planning strength of 5,000 or 6 additional messes. This project is required for the messing of 6 companies which presently do not have these facilities. Deferment of this project will create a hardship on the personnel who are required to use these messes, especially during severe weather.

LATRINES

The next item at Camp Hale is 3 latrines, $158,000. The latrines existing or planned for early construction with M. and O. funds consist of 6 T/O company type totaling 7,680 square feet; 5 metal prefab 2-company type totaling 9,600 square feet; 1 metal prefab company type totaling 1,920 square feet; and 2 in the fiscal year 1955 MCA program totaling 2,560 square feet. These units are sufficient for 18 companies and the station complement or 3,800 troops. The requirement for additional latrines is based on a planned strength of 5,000, requiring 3 additional 2-company latrines. This project will complete requirements for this type of facility. Deferment of this project will create a hardship on the personnel who are required to use these facilities, especially during severe weather.

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COMPANY ADMINISTRATION AND CLASSROOM BUILDINGS

The next item at Camp Hale is 6 company administration and classroom buildings, $175,000. The company administration and classroom buildings existing or planned for early construction with M. and O. funds consist of 18 metal prefab units each 20 feet by 96 feet in size. These units are sufficient for 18 company areas and the station complement of 3,800 troops. The requirement for additional buildings is based on a planned strength of 5,000 or 6 additional buildings. This project will complete requirements for this type facility.

FAMILY HOUSING

In addition we are requesting 1,000 sets of family quarters, $13,324,000. The total amount of appropriations in this request is to be applied to unfunded authorization in last years family housing law of $13,427,000.

This request is for family quarters for 780 noncommissioned officers; 201 company grade; 16 field grade; and 3 general or commanding officer quarters.

The total requirement is 6,867 sets; the assets are zero. Therefore, the full requirement is a deficit, and 100 percent of this request will be new assets.

Mr. RILEY. This is rather a full program. Are these replacements for facilities which have more or less completed their usefulness?

Colonel SHULER. These are permanent buildings to replace the World War II modified emergency-type buildings now at Camp Carson which have about finished their useful life. Some items in this request are additional facilities which do not exist there presently, but these are very few.

Mr. RILEY. You also have artillery training there?

Colonel SHULER. We have training here, sir, for normal infantry division training, and in addition we have the cold weather training, the mountain type training, at Camp Hale, and there is some artillery firing up there in connection with that training.

Mr. RILEY. Is this the only base you have where you can give cold weather training?

Colonel SHULER. Camp Hale is the only base we have that adequately satisfies our needs for cold weather and mountain warfare training. It was utilized during the last war.

Mr. RILEY. I believe there was some discussion about the ultimate buildup at Fort Carson when you were before the full committee. Could you give this subcommittee some brief description as to the future maximum buildup at Fort Carson under your present plans?

Colonel SHULER. Our present plans at Fort Carson call for a permanent peacetime strength—which is the one we would get to in the indefinite future if the world were at peace—of 23,680 enlisted men; 2,631 officers; and 2,000 civilians, or a total of about 28,000. To this must be added the wives and children of those married persons involved, a total population of about 40,000.

The present strength at Fort Carson—and by that I mean about the end of 1954—was 25,633 enlisted men; 1,680 officers; and 2,007 civilians, or about 30,000. We have no intent of increasing the size of Fort Carson or building it up. We merely want to replace what is

there now, temporary type structures, with permanent type construction.

WATER SUPPLY

Mr. RILEY. What about the water supply there? We have heard considerable discussion of that.

Colonel SHULER. Mr. Chairman, the water situation in the vicinity of Colorado Springs has been carefully studied and the present water supply has been declared adequate for the uses of Colorado Springs, the Air Academy, and Fort Carson; and a study has been made of the future requirements there and we have assurances from responsible people of Colorado Springs that their plans will take care of any future requirements in that area.

Mr. RILEY. Is that wishful thinking or do you think from the Army's studies that the water supply can absorb all these installations and the future growth that is bound to occur as a result of these installations?

Colonel SHULER. I cannot speak as an authority for the Air Force, but to my knowledge the Air Force had a study made of this situation prior to selecting this area for their Air Academy.

Mr. RILEY. That study was made by the Air Force?

Colonel SHULER. I believe that the study was made by the firm of Black & Veatch, a very eminent firm, and their report showed the water situation was all right. And I know the Army has studied the situation and we feel that the water supply will be adequate. If I may say something off the record.

(Discussion off the record.)

Colonel SHULER. May I ask permission, Mr. Chairman, to furnish for the record an exhaustive statement on this water-supply problem?

Mr. RILEY. I think that would be very helpful.

(The statement referred to follows:)

The most complete data now available to Department of the Army on the water-supply problem vicinity of Colorado Springs, Colo. are contained in an extract from the Engineering News Record and in two letters (June 12, 1954, and January 27, 1955) from the city of Colorado Springs, Colo. to the Secretary of the Air Force. [Enclosed.]

CITY OF COLORADO SPRINGS, COLO.,
DEPARTMENT OF PUBLIC UTILITIES—WATER, ELECTRIC, GAS, SEWER,
February 28, 1955.

OFFICER-IN-CHARGE,
Engineering Section, United States Fifth Army,
Chicago 15, Ill.
(Attention J. T. Franks.)

DEAR SIR: Enclosed is the material which was requested by your office in a telephone conversation yesterday, February 25, 1955.

Permission was granted us by Col. A. E. Stoltz, Director of Air Force Academy Construction to forward to your office the enclosed copies of letters addressed to Hon. Harold E. Talbott, Secretary of the Air Force.

The construction schedule for the city's transmountain diversion is also enclosed with penciled notes to bring it up to date.

Please feel free to call upon us for any additional data which you may require.

Very truly yours,

J. S. NICHOLS,
Superintendent, Water Division.

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JUNE 12, 1954.

Hon. HAROLD E. TALBOTT,
Secretary of Air Force,
The Pentagon, Washington, D. C.

DEAR SIR: The department of public utilities, city of Colorado Springs includes the division of water and water works. This division of the department of public utilities administers the municipal water system which, in addition to supplying and distributing water to the city of Colorado Springs, also furnishes water to some 8,000 consumers in the fringe and suburban areas and to the military establishments located at Camp Carson, Peterson Field and Ent Air Force Base. The entire area of Ivywild and Broadmoor are served by private utilities companies, namely the South Suburban Water Co. and the Broadmoor Water System. These utilities companies are privately owned and in no way associated with the city nor the municipal water system. Their sources of supply are not the same as those of the municipal water system and their water requirements are their sole responsibility.

In the past, the needs of the city and consumers of water in the community have been provided for by the collection and utilization of water from drainage areas at comparatively high altitudes on the north and south slopes of Pikes Peak and the higher reaches of the West Monument Creek Basin, in which are located our Northfield Reservoirs. By virtue of city ownership of the priorities of right to the use of water in these areas, both in direct and storage rights, the municipal water system takes practically all the water produced in these named water basins.

The utilization of the water is accomplished by interception of streams, collection conduits, ditches, and high-altitude reservoirs. These reservoirs have a capacity of 4,830,082,000 gallons (14,823 acre-feet). By reason of the elevation of these drainage areas and the favorable physical and mineral conditions, the water is of excellent quality. The average annual yield of the North and South Pikes Peak basins and the West Monument Creek drainage area, as regulated and carried over in the reservoirs, is approximately 4,465 million gallons (13,700 acre-feet).

The city also owns priorities and rights to the use of practically the entire flow of water in Monument Creek above Pikeview and Fountain Creek on the west city limits of Colorado Springs. To utilize these waters on Fountain and Monument Creeks, the city has constructed pumping facilities to transport the water to a filtration and treatment plant. The average annual yield of water from these sources is 991,250,000 gallons (3,050 acre-feet).

At all times subsequent to the origin of the city water system in 1878, those charged with the responsibility of administering the municipal water plant have endeavored to pace the water supply in advance of requirements, anticipating the increasing population and consumer demands so that they would be safely assured. Accordingly, in the early 1940's, active reconnaissance work was carried on to develop a project which would provide the city a substantial supplementation of high quality water. As a result of exhaustive surveys, engineering work, legal studies, and other efforts, it was decided that the water basin in the headwaters of the Blue River, Summit County, Colo., on the Pacific slope of the Rocky Mountain Continental Divide met the requirements of the city in securing a substantial augmentation of water in quality equal to our present supply. Moreover, this source of supply has been further supplemented by the purchase of water rights in the South Park area, through which the Blue River line will run.

The Blue River water basin consists of approximately 20 square miles at an altitude of approximately 10,500 feet. Studies by competent engineers, in no way connected with the city, have estimated the production of water in this area from 18,000 to 22,000 acre-feet per year, which amounts to 6,500 million gallons or 20,000 acre-feet for the average figure.

To assure the legal right to the use of these waters, the city had previously purchased unadjudicated and adjudicated water claims. Subsequent to the purchase of these claims, a change in point of diversion has been accomplished for the adjudicated rights and an adjudicated decree has been procured as to the unadjudicated claims. The adjudicated decree, made and entered by the district court of Summit County on March 10, 1952, awarded the city of Colorado Springs priorities to the use of water from the Blue River, Hoosier Creek, East Hoosier Creek, McCullough Creek, Spruce Creek, and Crystal Creek and other lesser tributaries of the Blue River in an amount not to exceed 6,500 million gallons (20,000 acre-feet) per year.

Inasmuch as the water is located on the Pacific slope of the Continental Divide, it is necessary that the water be taken under the mountains by a tunnel,

and from thence transported to the municipal system of the city of Colorado Springs. At the present time this tunnel has been completed; a pipeline connects the tunnel with the Blue River and another pipeline has been built from Hoosier and East Hoosier Creeks to the tunnel. The water is presently transported down the Platte River, stored in Eleven Mile Canyon Reservoir belonging to the city of Denver, where it is released in the desired quantity to the city pumping plant located downstream and from thence carried in a pipeline to the South Catamount Reservoir of the city. These enumerated facilities have been constructed at a cost of approximately $6,500,000.

In order that a greater supply of water can be furnished more rapidly to the city of Colorado Springs, the city council has authorized the construction of a reservoir and the completion of a gravity line from the tunnel portal to the line presently connected with our city water system. The approximate cost of these facilities is $8,500,000, and this amount can be financed by the city.

In pursuance of our plan to supplement the western slope supply of water, filings have been made upon tributaries of the Eagle River and this water can be made to augment the city system when necessary. Moreover, as part of our program to implement the supply of water by the purchase of water rights in the South Park area, which is in the South Platte River watershed, the city has purchased a large ranch with a number of water rights, two of which especially are very early in priority and for a considerable quantity of water. The Beery Ditch, having a priority date of June 15, 1861, is the earliest right in the South Park area and one of the earliest on the entire Platte River. Ranch holdings also include the Thompson-Radliff Ditch, on the South Fork of the South Platte River, which has a priority date of April 12, 1879. It is proposed that additional rights will be purchased in this area as the opportunities occur and as the need therefor by the city arises. It is anticipated that at least 325 million gallons (1,000 acre-feet) of water per year can be procured from the ranch property already purchased.

In addition to legal consultants, including the late Judge McHendrie and the late Governor Carr, who have advised the city attorney on the legal ramifications of the situation, the city has consulted with Mr. E. B. Debler, a prominent engineer-hydrologist. Mr. Debler's background of experience includes the position of senior engineer-in-charge of hydrology and director of region No. 7 of the Bureau of Reclamation. The firm of Black & Veatch, Kansas City, Mo., are the consulting engineers for the city for the construction of the project.

The city is presently entering into arrangements for the development and utilization of underground waters in the vicinity of Colorado Springs, inasmuch as these waters can be brought into the city system quite rapidly, and can be used as a supplemental supply in addition to the transmountain diversion project.

CONCLUSIONS

The total use of water from the city water system for the year 1953 was 5,047,250,000 gallons (15,530 acre-feet). The projected water requirements and supply of water therefor are set forth as follows:

Use requirements (annual basis)

	Acre-feet	Gallons
Present demands based on 1953 use	15,530	5,057,250,000
United States Air Academy needs	3,370	1,095,000,000
Estimated increase in system	1,270	412,750,000
Total	20,170	6,555,000,000

SOURCES OF WATER SUPPLY (ANNUAL BASIS)

Production from Pikes Peak watershed	16,750	5,443,750,000
Available from Blue River with present facilities	4,400	1,430,000,000
Available from Blue River from additional pumps to be installed in 7 weeks	2,200	715,000,000
Available from Blue River upon completion of pipeline, July 1, 1955	2,200	715,000,000
Available from Blue River upon completion McCullough Creek diversion facilities, June 1956	4,000	1,300,000,000
Available from Blue River upon completion of diversion facilities to Spruce and Crystal Creeks, 1957–58	4,400	1,430,000,000
From South Park Ranch rights, 1955–58	1,000	325,000,000
Total	34,950	11,358,750,000

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It will be noted that the underground waters heretofore mentioned are not included in the above tabulations, since we do not feel that the supply thereof can be computed on a firm basis similar to the surface waters which have been, of course, available for accurate computation. The city does intend to immediately install pumps and other facilities to develop this water and it is hoped that an annual supply of 975 million gallons (3,000 acre-feet) may be obtained.

From an examination of the conclusions set forth above, it is apparent that we have available a supply of water not only for present system and Academy requirements, but a surplus of 4,803,500,000 gallons (14,780 acre-feet) to provide for possible future growth and other contingencies and to insure adequate water for all these needs.

We will be very happy to furnish any additional data to support or supplement the above.

Respectfully submitted.

THE CITY OF COLORADO SPRINGS, COLO.
By: F. T. HENRY, *City Attorney.*

Approved:

JOHN M. BIERY, *City Manager.*

JANUARY 27, 1955.

Hon. HAROLD E. TALBOTT,
Secretary of the Air Force,
Washington, D. C.

DEAR MR. SECRETARY: Reference is made to letter dated June 12, 1954, addressed to you from the city of Colorado Springs concerning the supply of water for the Air Force Academy. A copy of this letter is attached as exhibit A.

Due to an apparent existence of doubt as to the capability to supply an adequate quantity of water for the Air Force Academy, it is desired to restate and reemphasize our position as follows:

(*a*) We believe that our letter of June 12, 1954, (exhibit A) constituted a full and accurate explanation of the municipal water system of the city of Colorado Springs, its sources of water supply in the Pikes Peak region and the Blue River watershed. At the time the statements in this letter were made, we believed them to be accurate and correct, and at this time we believe that the statements made therein are true and correct. We have no correction of sufficient importance to merit inclusion in this letter.

(*b*) In our letter of June 12, 1954, we pointed out that facilities costing approximately $6,500,000 to divert and transport Blue River water to the city of Colorado Springs had then been completed. We further mentioned in said letter that the city council had authorized, as a part of this system, a storage reservoir and the construction of the necessary pipeline to provide a complete gravity line from the outlet of our transmountain tunnel to our existing water system. Since the writing of this letter a contract has been awarded for the construction of the storage reservoir at a cost of $2,500,000, exclusive of dam facing. Also, since the letter was written, pipe has been purchased, contract awarded, and work commenced for the laying of the pipeline above mentioned in the aggregate cost of $4,900,000. The pipeline will be completed on or before July 15, 1955, and the reservoir has been commenced and will be completed in the early fall of 1956.

Page 4 of the letter of June 12 contained a projection of the water contemplated from the Blue River, pursuant to the schedule of construction therein set forth. It was stated that the McCullough Creek diversions of the Blue River project would be completed by June 1956. In this regard the city expects to be a full year ahead of schedule inasmuch as contract has previously been awarded for the construction of a tunnel to McCullough Creek. The tunnel is about half finished and it is expected that with its appurtenant features and pipelines will be completed and these facilities in use by June 1, 1955. The cost of this part of the Blue River project will exceed $450,000.

(*c*) Subsequent to the time that the letter of June 12 was written, the Supreme Court of the State of Colorado, in a divided opinion, affirmed the decision of the Summit County district court in which Colorado Springs was awarded a priority date of 1948. The district court had awarded Colorado Springs the right to divert a maximum of 400 feet of water per second of time from Hoosier Creek, the Blue River, McCullough Creek, Spruce Creek, and Crystal Creek. The decision of the supreme court in no way affected the right of the city in this regard, nor did it concern the other rights of the city which had been previously adjudicated. Accordingly, the supreme court's decision did not deprive the city of Colorado Springs anything granted under the decree of the State district court.

Apparently, contention is made that the quantity of water contemplated by the city of Colorado Springs from the Blue River project will not be available under the 1948 priority as awarded to the city. To argue this question incessantly would perhaps serve no useful purpose. It is not disputed that the average quantity of water as projected by the city is available from the Blue River and its tributaries. It also cannot be disputed that if there is available water which cannot be diverted under the 1948 decree and the other decrees of the city, that such available portion of the water unquestionably can and will be secured by the city under its right of eminent domain.

Section 6 of article 16 of the constitution of the State of Colorado provides as follows:

"Diverting unappropriated water—Priority—The right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied. Priority of appropriation shall give the better right as between those using the water for the same purpose; but when the waters of any natural stream are not sufficient for the service of all those desiring the use of the same, those using the water for domestic purposes shall have the preference over those claiming for any other purpose, and those using the water for agricultural purposes shall have preference over those using the same for manufacturing purposes."

Subsection 73 of section 10, chapter 163 of the Colorado Statutes Annotated, 1935 provides as follows:

"May take water—They (towns and cities) shall have the right and privilege of taking water in sufficient quantity, for the purpose hereinbefore mentioned, from any stream, creek, gulch or spring in the State: *Provided*, That if the taking of such water in such quantity shall materially interfere with or impair the vested right of any person or persons or corporation, heretofore acquired, residing upon such creek, gulch or stream, or doing any milling or manufacturing business thereon, they shall first obtain the consent of such person or persons or corporation, or acquire the right of domain, by condemnation, as prescribed by the constitution and laws upon that subject, and make full compensation or satisfaction for all the damages thereby occasioned to such person or persons or corporation."

In our considered opinions, reached without fear of contradiction, we will state unequivocally that under the constitutional provisions cited, the statutory enactments set forth, together with the applicable law relating to the power of condemnation and eminent domain possessed by municipalities, the city of Colorado Springs has the full right and power to appropriate to its use water of the Blue River and its tributaries. I am also authorized to state in behalf of the city that if it is necessary for such powers to be exercised, that the city will do so to procure the water available at its points of diversion on the Blue River and its tributaries. If it is necessary to resort to eminent domain proceedings, possession of the water can be procured immediately by making proper deposits in the court registry.

(*d*) It was mentioned in the letter of June 12 that the city of Colorado Springs was developing underground water resources for the special purpose of providing the immediate requirements of the municipal system, pending the completion of the Blue River project. Following this program, contracts were made with the owners of wells several miles south of the city of Colorado Springs. The pumps, pipelines, and other facilities for the collection and transportation of this water into the city system were completed in the month of August 1954, and water produced from these well sources has averaged about 2,500,000 gallons per day.

Following this program of implementing the immediate water supply, arrangements are being effected to procure an additional supply of underground water from wells a few miles east of the city. Agreement has been reached with the owners of these wells for the purchase of the water and the city council has authorized the construction of a pipeline and other facilities to bring the water to Colorado Springs. It is expected that this source of water will exceed 3 million gallons a day from the period from April to November of the year and next year. The city is investigating the possibility of acquiring additional underground water from sources about 20 miles east of the city. The augmentation of the municipal water supply from these sources would amount to from 5 to perhaps 7 million gallons of water per day.

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The city of Colorado Springs has made substantial progress in the supplementation of its long-range water needs of its municipal water system for supplies in addition to the Pikes Peak and Blue River watersheds. Negotiations are pending with the Twin Lakes Reservoir & Canal Co. for the purchase of 10,000 acre-feet or more per year of water from this company. At the annual stockholder's meeting, the company was authorized to make a legal and engineering investigation relative to the sale of water to Colorado Springs. Contractual arrangements are being effected with Boettcher & Co. of Denver to develop a very substantial supply of water from one of the main tributaries of the Eagle River. The estimated supply of water to be allocated to Colorado Springs from this source is 15,000 acre-feet per year.

It is not felt that the city, even under the most adverse conditions, will require all the water which would be produced under these projects, but it is pursuing a plan which will insure the city from one or both of the projects, an ample supply of water for any and all reasonable increases in population and additional demands for water.

It will be noted that the foregoing estimates of long-range supplies do not include any water from possible participation in the Bureau of Reclamation Fryingpan-Arkansas project.

(c) The water producing season of 1953–54 for the Pikes Peak watershed was the lowest in the recorded history of the watershed. The average annual yield of the north and south slopes of the Pikes Peak watershed (Ruxton Creek, Beaver Creek, and the high tributaries of Fountain Creek) is 11,500 acre-feet. The water production for the 1953–54 season was approximately 5,000 acre-feet. This very substantial deficiency in precipitation and consequent water production, coupled with the rapid growth of the community and the fact that the Blue River diversion project has not been completed, resulted in some restriction of the use of water for irrigation of lawns and shrubbery. While this restriction in the use of water has not been completely terminated, the city council has substantially relaxed the use of water for the coming irrigation season. It is anticipated that if the watershed has a normal precipitation this spring, the restrictions will be lifted entirely, even before the completion of the Blue River projection.

In summary, the city of Colorado Springs has agreed to supply potable water to the Air Force Academy site in a quantity of 5 million gallons per day. Upon completion of the Blue River project, which completion date is estimated not later than early in the year 1957, capability will exist to supply this quantity. For the interim period during construction, sufficient water can be supplied for construction purposes. Further, the supply of this quantity of water to the Air Force Academy will not be jeopardized in the foreseeable future by limitations generated by increased commercial or domestic use of water. It will be noted that the estimated firm annual water production is 34,950 acre-feet or 11,358,750,000 gallons. The estimated requirements including the Air Force Academy is 22,337 acre-feet or 7,270,000,000 gallons. The difference in excess of requirements is 12,613 acre-feet or 5,088,750,000 gallons which will support a population growth from present population of 55,000 to about 100,000.

The supporting data for the information presented herein has been developed by recognized specialists and consulting engineers, and can be provided if required.

The city of Colorado Springs can and will supply the required quantity of water for the Air Force Academy and will defend this position to the extent and in such detail as may be required.

Respectfully submitted.

THE CITY OF COLORADO SPRINGS, COLO.

Construction item	Engineering	Plan and specifications	Bids open	Contract award	Completion date
Montgomery Dam	Completed, except deck.	Completed, except deck.	July 12, 1954	July 30, 1954, Fisher Contracting Co.	October 1956, with deck.
Lake George to Montgomery line pipe materials only.	Completed	Completed	Aug. 6, 1954	Aug. 17, 1954, Basalt Rock Co.	Nov. 15, 1954 (90 days), all pipe is now stockpiled on job.
Lake George to Montgomery line, construction.	do	Sept. 15, 1954	Oct. 1, 1954	Oct. 15, 1954	July 1955, work is now in progress.
Quandary Tunnel	do	Completed	Sept. 15, 1954	Oct. 1, 1954	May 1, 1955, 65 percent completed now.
Pipelines, north slope to north field, to Air Academy.	Contract awarded Aug. 3, 1954, Douglas Jardine.	6 weeks from Aug. 3, 1954.	Oct. 7, 1954	Oct. 21, 1954	Aug. 21, 1955.[1]
Blue River siphon and McCullough Creek diversion.	Sept. 7, 1954	Sept. 7, 1954	Sept. 24, 1954	Oct. 1, 1954	May 1, 1955.

[1] The construction of facilities for transporting steel to the Academy site will be accomplished under 3 separate contracts:
1. Material supply contract covering 41,000 feet of 24-inch outside diameter steel pipe. Bids to be opened Mar. 2, 1955.
2. 4,000-foot tunnel for pipeline. Bids to be opened Mar. 30, 1955. Completion expected by Sept. 1, 1955.
3. Installation of 41,000 feet of 24-inch steel pipe. Plans and specifications ready for advertising. We expect to set bid opening date about May 1, 1955 and expect completion about Oct. 1, 1955.

[From Water Works Engineering, July 1954]

Colorado Springs Gets Water From Western Slope

G. R. Scott, D. P. Proudfit, and M. Hemker [1]

Colorado Springs, on the eastern slope of the Rocky Mountains, is in a low rainfall area. The population and industrial growth of the city caused the water demand to exceed the available local supplies. To secure an adequate supply, an unlined tunnel was cut through to the west slope and several watersheds tapped to supply Colorado Springs. The author describes the new water system with its high heads and long delivery pipelines.

The combined effect of low rain and snowfall on Pikes Peak during recent years and increased demands for water by the growing city and expanding military activities has caused Colorado Springs, Colo., to embark on a very ambitious and expensive program to enlarge its water supply. When the plan is completed, the water will be transported by gravity from the western slope of the Continental Divide to the taps of the consumer in the city, a distance of about 90 miles.

Colorado Springs, is located on the eastern slope of the "Front Range" of the Rockies just east of Pikes Peak. Fountain Creek, originating between Pikes Peak and Manitou Ridge, is joined at Colorado Springs by Monument Creek, its northern tributary which parallels Manitou Ridge on the east. From Colorado Springs, Fountain Creek flows south and discharges into the Arkansas River at Pueblo.

Normally, neither Fountain nor Monument Creek carries much flow. Their drainage areas, located on the eastern slopes, do not receive much rainfall. The average annual precipitation is about 17.5 inches and the minimum about 10.5 inches.

Some water is obtained by Colorado Springs from the streams, and a small amount is drawn from four small reservoirs located on the eastern slope of Manitou Ridge. In the past, however, major dependence for an adequate supply has been placed on rain and snow falling on Pikes Peak. This water is stored in nine reservoirs, two located on the northern slope of the peak and the remainder on the southern slope.

[1] Principal Engineer, Project Engineer and Resident Engineer, respectively, Black & Veatch, Consulting Engineers, Kansas City, Mo.

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The total capacity of the reservoirs on the system is 4.83 billion gallons. The average and minimum expected annual yields are as follows:

	Average yield, million gallons per day	Minimum yield, million gallons per day
Storage reservoir system	11	4.6
Surface streams	6	3.5
Total	17	8.1

It is estimated that during 1952, the water division of Colorado Springs served approximately 60,000 people, plus Camp Carson and other Army and air service activities in the immediate area. The average per capita consumption during the last 10 years has been 150 gallons per day, with the years of maximum usage approaching 200 gallons. These years of maximum usage were generally those of plentiful rainfall. In 1950, a year of low precipitation, the requirement of about 11 million gallons per day average was met, but restrictions on use were necessary in 1951 because of the depletion of storage and the continued lack of precipitation during the recent widespread drought condition. These years of subnormal precipitation, coinciding with a period of rapid growth, have clearly demonstrated the need for an additional supply of water.

The need, however, had been anticipated for a number of years, and studies were made by the city to discover additional sources of water. It was soon apparent that no adequate additional supply could be developed economically on the eastern slope and that Colorado Springs must transport water from beyond the Continental Divide in order to support its continuing growth. In 1947, the city purchased the water rights of Bishops Ditch, and its program of expansion became active, both in construction and in legal procedures, to acquire additional water.

The Bishops Ditch diverts water from the Blue River drainage area west of the Continental Divide, just north of Hoosier Pass and south of Breckenridge. The original amount of water acquired by the city was 2.7 million gallons per day; but the city has since received favorable ruling by the courts for additional water, and it is estimated that about 3,651 million gallons may be expected from the available drainage area during years of average precipitation.

TUNNEL THROUGH DIVIDE HAS CROSS-SECTION OF 54 SQUARE FEET

A tunnel was started through the Continental Divide in 1948 and completed in 1951. This tunnel is unlined, 7,783 feet long, with a cross-section of 54 square feet on a grade of 0.75 percent and having a capacity of 360 cubic feet per second. The inlet portal is at elevation 10,987 and the outlet portal 10,933. Diversion structures have been constructed across Blue River and Hoosier and East Hoosier Creeks and the water from these streams is piped to the tunnel. A 52-inch steel line connects the Blue River to the tunnel. A 36-inch steel line extends from the tunnel to Hoosier Creek, and a 30-inch line from this point to East Hoosier Creek. These diversion works are designed to provide 5,100 acre-feet of water as the initial step in the development of the western slope supply. Storage reservoirs on the upper tributaries of the Blue River and additional diversion and collecting works must be completed before the full water yield of the area can be realized. The Blue River map illustrates one possible method by which this supply can be developed.

Studies have been made of sites for storage reservoirs on the eastern slope of the divide. The map shows the Montgomery site which has been selected. Plans are now being prepared for a rock-filled dam having a watertight deck or membrane of asphaltic concrete on the upstream face. The capacity of the reservoir will be 5,100 acre-feet for the initial phase and may later be increased to 9,800 acre-feet by increasing the height of the dam.

WATER FROM HOOSIER TUNNEL WILL FEED INTO MONTGOMERY RESERVOIR

When the presently conceived plan is completed, there will be a 30-inch steel line extending for a distance of about 72 miles from the Montgomery Reservoir south and east by Alma, Fairplay, and across South Park and over the ridge

between the South Platte River and the Arkansas River near Divide, Colo., to discharge into a proposed reservoir on North Catamount Creek. Due to the character of the terrain and the necessity of crossing from one major drainage basin to another, the operating heads are high; exceeding 1,000 feet over much of the length and at the maximum reaching 1,900 feet.

The city, however, must be able to draw from the supply before this ambitious program is completed. Some water was diverted through the tunnel in 1952 and 1953 and stored in Antero and Eleven Mile Reservoirs; two reservoirs on the South Platte section of Denver's water supply. A pipeline was completed in November 1953, from the South Platte River at the lower end of Eleven Mile Canyon near Lake George to South Catamount Reservoir, an existing storage reservoir on Colorado Springs system located on the north slope of Pikes Peak. A rock dam has been constructed across the South Platte River at the point of diversion, and 2 pump stations have been built to lift water from the South Platte River to South Catamount Reservoir. The total pumping head, including friction, is 1,630 feet and the work is accomplished in 2 lifts each 815 feet.

Each station includes 2, 2-million-gallon-per-day electric motor-driven pumps and one 1-million-gallon-per-day propane gas engine driven standby unit. The water from the lower station discharges into a surge tank which serves as an intake well for the second pump station. The controls of all electric motor-driven units are located in a lower station so that only one operator is required for normal operation. Should it be necessary to use the gas engine-driven units, additional supervisory personnel will be required.

PIPELINE IS MOSTLY 30 INCHES IN DIAMETER

With the exception of 2 relatively short sections, 1 at either end, the pipeline is 30 inches in diameter and designed eventually to become a portion of the line extending from Montgomery Reservoir to North Catamount Reservoir. A section of 16-inch pipe, 4,760 feet long, extends from the pump station on the South Platte River to the 30-inch line, and a section of 14-inch pipe, 5,944 feet long, extends from where the 30-inch line enters the North Catamount drainage area over the South Catamount area. Neither of these small sections will be required when the line is completed from Montgomery Dam.

The length of the section of 30-inch diameter line is 87,693 feet, or 16.6 miles. The entire line is of steel, lined and coated with coal-tar enamel, meeting the standard AWWA specifications. It is the design and construction of the 30-inchline that is of principal interest in this discussion.

Studies of the requirements for water indicate that eventually it will be desirable to transport water from this western area to the city at rates of about 18 million gallons per day. The value of C=130 was used in the Hazen-Williams formula to obtain the size of the pipe. Since the hydraulic gradient for the completed line is 3.3 feet per 1,000 feet, the required pipe size is 30 inches.

In order to expedite the work, bids were received and contracts were awarded for the purchase of the pipe before the installation plans were completed. Bids were based upon AWWA specifications 7A.3 through 7A.6, inclusive, for welded steel pipe with shop applied coal-tar enamel linings and coal-tar enamel and whitewash exterior coatings.

The pipe manufacturers were requested to furnish the most economical pipe, for each internal working pressure classification, for the 30- and 16-inch pipe; the thicknesses to be obtained by the following formula: $T=\frac{PD}{2S}$; in which P= working pressure in pounds per square-inch; S=unit stress in pounds per square-inch; T=pipe wall thickness in inches, and D=outside diameter in inches. In applying the formula, the maximum unit stress allowed in pipe design was 50 percent of the minimum yield point of the steel. Minimum wall thickness permitted for 16- and 30-inch size pipe was 0.25-inch and for 14-inch pipe was 0.1875-inch.

Pipe wall thicknesses for the 30-inch pipe as furnished varied from 0.25-inch for the 240 pounds per square-inch classification (minimum allowable) to 0.47-inch for the 750 pounds per square-inch classification; the latter being based upon steel of 50,000 pounds per square inch minimum yield point. There were 9 different classes, or working pressures, including these 2 limiting pressures, for which pipe was furnished. All 30-inch pipe was furnished in 40-foot lengths, 14- and 16-inch pipe was furnished in double random lengths up to 40-foot maximum.

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30-INCH PIPE LAID IN 120-FOOT LENGTHS

The use of coal-tar enamel lining and coating was the principal cause of the adopted construction procedure. Because of the difficulty anticipated in making repairs to, and inspecting inside lining at pipe joints, an all welded line, feasible when unlined, was impossible for the 14- and 16-inch pipe and considered impracticable for the 30-inch pipe. Therefore, the method specified for 30-inch size consisted of joining, by butt welding, 3, 40-foot lengths on the trench bank, then coupling the resulting 120-foot lengths with Dresser couplings in the trench. This procedure permitted easy access to, and the repair of the inside lining at welded joints, and eliminated the need for pass holes in the pipe and problems in ventilation that would have accompanied all-welded construction. Pipes 14 and 16 inches in diameter were connected by Dresser couplings and welding, except for special bends or installation of fittings, was prohibited.

Problems of anchorage at points of change in vertical and horizontal alinement were caused by the high operating pressures. At some horizontal alinement changes, the reactions caused by these pressures reach magnitudes in excess of 400,000 pounds. Where changes in direction resulted in reactions of significant magnitude, reinforced concrete thrust blocks were designed to distribute the loads to the trench banks where they are resisted by passive earth pressure. Vertical reactions at summits were held to a minimum by designing long sweeping vertical curves, to be obtained through deflection at Dresser couplings. However, where topography prohibited this solution, mitered deflections were made and sufficient weight of concrete was designed to resist the vertical reaction.

Expansion and contraction of the pipeline in itself was not a problem as the expected temperature range (about 40° F.) will result in a change in length of only about ⅜-inch for each 120-foot length of 30-inch pipe. This change in length can be accommodated by the Dresser couplings. However, accumulative downhill creep on slopes, caused by alternate expansion and contraction of the pipe, under the proper conditions could result in a disconnected joint at a Dresser coupling. Therefore, slope anchors were placed at the midpoint of 120-foot pipe sections where slopes were sufficiently steep to permit creep. These anchors are reinforced concrete collars extending around the pipe and into the trench banks. Steel angles were welded to the pipe and encased in the concrete collars to provide the necessary physical bond. Similar anchors were also placed at the uphill end of every third 40-foot section of 14- and 16-inch pipe located on steep slopes.

Pipe grades were designed to be uniform between vertical angles, and a continuously upward or downward sloping gradient between such angles was required. This provided a vertical alinement on each side of each pipeline summit that prevented air pockets or traps which could reduce the capacity of the line.

Automatic air-release valves are installed at each pipe summit. They are float operated and have a relatively small venting capacity, but under normal conditions, with the pipeline flowing full, can be expected to evacuate the air as it accumulates. A manually operated gate valve is installed on the branch of a T inserted in the riser pipe from the pipeline to each air valve, to provide for a greater capacity for the release of air during the filling of the line or to provide means for manual blowoff of air.

Air-inlet valves were designed for principal pipe summits to prevent negative pressures in the pipe which would result in the event of a pipeline break or during filling operations. These valves are also automatic in operation and will remain open unless the pipe is flowing full. Therefore, although installed principally as vacuum-breaking valves, they incidentally serve to some extent as air vent valves during pipeline filling.

As temperatures as low as 35° to 40° F. below zero may be expected in the area and frost penetrates 6 feet below ground, special provisions were necessary to prevent the freezing of the pipelines and the air-inlet and release valves. The city's experience with the winter operation of their pipelines on the slopes of Pikes Peak indicated that deep cover would not be needed provided the water is flowing at all times in the line. Because of this experience, the minimum depth of cover was established at 3 feet, and the gas-engine-driven pumps were included in the pump station to provide standby service to keep the water flowing in case of power failure.

The protection of the air valves was a more difficult matter, since water would be standing in the connections and in portions of the valves themselves. It was first felt that some means of assuring a controlled amount of heat should be provided in each manhole. This could easily be done as the transmission line supplying power to the two pump stations parallels the pipeline. However, the method would be rather expensive as each installation would require a transformer and

thermostat in addition to the heating element. For this reason it was decided to see if the heat originating from the ground and rising up in the manhole would be sufficient to prevent the valves from freezing. The installation of the heating elements could be added later if they were required.

VALVE MANHOLES ARE INSULATED AND EXTEND 8½ FEET BELOW GROUND

Accordingly, the valve manholes were designed of 8-inch concrete blocks, insulated inside with Fiberglas. A thickness of 4 inches of Fiberglas was placed on the underside of the concrete cover slab and 2-inch thickness was placed on the walls. The walls of the manholes extend a minimum of 8½ feet below the ground surface or below the earth fill placed around the manhole, depending upon whether the pipe location is in deep or shallow trench. The walls were built around the pipe and the bottoms were left open to permit the transfer of ground heat. Insulated vents were provided in each manhole to permit entrance of air when the vacuum valves operate, but equipped with checks to retard the escape of heat from the manhole.

Unfortunately, the provisions were not sufficient to prevent the freezing of the air valves during severe cold spells. Cold air entered the manholes through imperfectly fitting covers over manhole entrances and down the air vents. Frost formed in the air vent piping inside the manhole. Because of these conditions, all air valves were closed off and drained, and the manholes were packed with straw for the winter.

Blowoff and drain valves were designed for each low point in the pipeline. These are flanged gate valves bolted directly to flanged fittings welded to the pipeline eccentrically to permit complete drainage of the line. Discharge lines extend beyond the valves and discharge into structures of two kinds.

The first type of structure is a baffled headwall set at grade in a convenient natural drainage course, at an elevation below the pipe invert, thus permitting free drainage of the pipe. The second type is a pumping well designed for installation in locations where the pipeline invert was lower than the profile of any natural drainage course within convenient distance. This structure is a relatively watertight reinforced concrete sump with a gasketed and bolted cover. When desired to drain the pipeline, the blowoff valve will be opened and the gradient in the pipeline may be lowered to the elevation of the sump cover. From this elevation, it will be necessary to pump for complete dewatering of the pipeline. Sumps were made watertight to prevent filling with surface or ground water or leakage from blowoff valves, which water could freeze and make the valves inoperative.

Design requirements for the 16-inch line in general were comparable to those adopted for the 30-inch line. The 16-inch line is a pumping force line and will not be a part of the future gravity line from Montgomery Dam. It may, however, be maintained as an emergency standby installation. For this reason the design pressure was established as 720 pounds per square inch, required if desired to pump against future pressure gradient in the 30-inch line, whereas the actual pumping head for present operation is only approximately 350 pounds per square inch.

A study of water hammer was made, in connection with the design of the pump stations, and pressure rise was calculated assuming power failure to the electric motor-driven pumps. It was found that the 30- and 16-inch pipe strengths were adequate for any anticipated pressure rise induced by water hammer; however, the pumps and valves in the pumping stations required protection. Therefore, one surge-relief valve was installed in each pumping station. These valves will open to reduce pressure peak when the line pressure exceeds 365 pounds per square inch. The valves are of the automatic fast-opening slow-closing type.

Design of the 14-inch gravity line, from the end of the 30-inch pipe to South Catamount Basin, was not as critical as the design of the 30- and 16-inch lines. The problems of anchorage at bends and air inlet or release under pressure did not exist. Topography was such that one vent manhole to atmosphere in a selected location provided all necessary safeguards.

PIPELINE KEPT AS STRAIGHT AND ACCESSIBLE AS POSSIBLE

Two factors were kept in mind in making the field location for the pipeline. First, to keep the line as straight as the topography would permit, and second, to keep it accessible, initially for construction purposes and later for patrolling and maintenance during operation. As a result, the line for the most part is adjacent and parallel to existing county, State or Federal roads and highways

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over rolling topography. One section of the line took advantage of an abandoned railroad grade.

After the contractor had pioneered the right-of-way by clearing and establishing a working road, the entire line was resurveyed, with horizontal and vertical curves calculated to take advantage of the allowable deflection in the mechanical couplings. Wherever possible, all alinement changes, both horizontal and vertical, are made with long sweeping curves composed of chords 120 feet long. For the most part, all miter joints required for angular deflection were laid out to fall either at a joint, or in the case of considerable deflection in the center of a 120-foot section.

The contractor began operations on May 15, 1952. However, for some time prior to this time, 40-foot sections of lined and coated pipe were received by truck from Denver and stockpiled in previously designated areas located along the right-of-way. The jointing and laying operations consisted of first welding three of the lengths together and the entire section checked on the bank of the trench; this section was then lowered into the trench and coupled with Dresser style 38 couplings to form the completed line.

Before installing the sections of pipe in the trench, all welds were primed and coated on the inside and outside and the entire section checked on the outside for holidays with an electrical detector; the inside lining having been previously checked before shipment from Denver. Mechanical couplings were primed and coated after installation and as a further protection, were wrapped with a bitumastic impregnated cloth wherever ground water was encountered.

All welding was performed by competent, certified welders. One test plug was cut from each new man's first weld and additional plugs were cut whenever the welder was employed on pipe having a different wall thickness. Outside butt welding was used, and any weld showing improper penetration was further reinforced with an inside bead.

Trench excavation during 1952 was performed with 1 and sometimes 2 backhoe shovels; 1 having a capacity of ¾-cubic yard and the other 1¼-cubic yard working at various points along the line. Starting at one point and carrying the completed installation ahead, as in conventional pipeline practice, could not be performed because installation of the pipe depended on the class of pipe being delivered. For this reason, it was not unusual to have some work being performed on the various construction phases along the entire length of line.

The first section of pipe was placed in the trench on July 23, 1952, and installation was continued through the summer and fall until November 28. Operations at this time were abruptly suspended because of the complete failure of the coating and lining due to temperatures of 20° F. below zero which occurred during the night of November 27.

On hand and ready for installation in the trench at the time were 14 of the 120-foot sections of pipe which had to be recut and returned to Denver for recoating and relining. A later inspection of approximately 3,000 feet of the last pipe installed showed that the lining in this pipe was in good condition. Pipe installed in 1952 included 40,939 feet of 30-inch diameter and 5,944 feet of 14-inch diameter.

Operations were resumed again in 1953 on June 17 and continued to completion on September 29, 1953. During this final construction period, the contractor employed a ditching machine for trench excavation which greatly expedited the work. A backhoe, however, was still required to excavate for bell holes, blowoff structures, air valve manholes and anchor blocks.

Select bedding material for the pipe consisting primarily of disintegrated Pikes Peak granite, was obtained from material excavated from the trench. After the pipe was placed in the trench with sufficient select material on the sides for lateral support, a bulldozer was used to complete the backfilling. In placing the remainder of this backfill, the bulldozer worked on a slight angle with the trench, which resulted in the material assuming a long slope from which rocks, or other objectionable material, were removed by hand before they could come in contact with the pipe and damage the coating. After the backfilling was completed, the surface was graded, rocks and boulders were removed from cultivated fields, and fences were replaced. Hinged swinging gates were installed where the pipeline crossed a fence line, making it possible to travel the line for maintenance operations.

The greatest progress for any day during the construction period was the installation of 19 of the 120-foot sections of 30-inch pipe for a distance of 2,280 feet. The average daily distance for the entire line, including the 14-, 16-, and 30-inch pipe, was 492 feet.

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Filling of the line was started on October 20, 1953, and on November 1 water was discharged into the existing Colorado Springs Reservoir. This filling of the line was only incidental to checking out the pumping equipment and the above-noted time does not indicate the rate at which the line could be filled under normal operation.

A number of leaks were observed as the line was being filled. The excavation and repair of these carried the work too far into the winter to complete the pressure test, and this phase of the work must wait until the spring of 1954. All leaks which were found were caused by faulty installation of Dresser couplings. In some cases, it was found that the follower rings were in a bind with the pipe and were not pulled up evenly as the bolts were tightened.

The total cost of the project, including the diversion dam and the 2 pump stations, as well as the pipeline, was $2,176,240. The 30-inch line, including all materials and fittings, was installed at a cost of $19.57 per foot.

The steel pipe used in the program was supplied by two companies, the Thompson Pipe & Steel Co. and the Bethlehem Steel Co. The general contractor on the installation was the Hutcheson Construction Co., Denver, Colo. Black & Veatch were the consulting engineers for the pipeline and pumping stations. City officials, most directly associated with the work were T. M. Hohl, manager, department of public utilities and J. S. Nichols, superintendent, water division.

Fort Crowder, Mo.

Colonel Shuler. The next station, Mr. Chairman, is Fort Crowder, Mo., where we have a single item requested, and that is for family housing, which appears on page 59 of the family housing book, 70 family quarters $952,000, 52 are for noncommissioned officers; 16 for company grade; 2 for field grade.

We have a requirement at this post for 313 sets of family quarters. We have no assets. Therefore, we have a 100 percent deficit.

Mr. Riley. Before we pass on to the next station, are there any towns or cities near this station?

Colonel Shuler. Fort Crowder?

Mr. Riley. Yes.

Colonel Shuler. The nearest town is Neosho; it is about 8 or 9 miles from Neosho, Mo.

Mr. Riley. What is the size of it?

Colonel Davis. It is a very small town. It is about 10,000 population, Mr. Chairman, I believe.

Fort Leavenworth, Kans.

Colonel Shuler. The next station is Fort Leavenworth, Kans., on page 383 of the large book.

The items we are requesting to be funded are a station hospital, a command and general staff school academic building, a communications center building, a radio receiver building, and a radio transmitter building.

HOSPITAL

Mr. Riley. You have no station hospital there now?

Colonel Shuler. Mr. Riley, the existing hospital is composed of 109,217 square feet and it was built in 1900 and in 1902, with subsequent additions, and it provides poorly arranged and insufficient rooms, wards, clinics, and offices and does not permit proper segregation of infectious and contagious diseases. It has only one elevator and it is not fireproof. We feel, sir, that it would be very difficult to evacuate the upper floors in the event of fire.

Mr. Riley. This is to be a new hospital?

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Colonel SHULER. This is to be a permanent, new hospital.

Mr. RILEY. Is this the first request you have made for this purpose?

Colonel SHULER. That is correct.

Mr. RILEY. It will take more money to build a modern hospital, will it not?

Colonel SHULER. No, sir. The cost of this hospital, $2,700,000; this is a 90-bed hospital, on a 190 chassis which includes 14 prisoner-type beds, because a United States disciplinary barracks is located at this station.

I might add to the record that the population at Fort Leavenworth is rather unique. It poses special problems in regard to medical work which are not found at other stations. The military population at the post is predominantly field officers, practically all of whom reside with their families on the post; that is because of the composition of the student body in the school. The enlisted strength is relatively low. The impact of this situation is felt by the medical service in the form of an extremely high proportion of dependent care. At the present time, 50 percent of the operating beds are allowed for female. In addition, the pediatric workload is heavy and the station allocates additional beds for children. We also have, as I said before, the inmates from the United States disciplinary barracks.

Mr. RILEY. Is it your purpose to continue to use the present hospital facilities, or are you going to demolish them?

Colonel SHULER. We are going to demolish them. They are so old and so unsatisfactory that we are going to demolish them.

Mr. RILEY. That is what I understood, but with such a small hospital, do you think that is sufficient to cover your needs?

Colonel SHULER. We feel this will cover our needs there, yes. You see the total strength at Fort Leavenworth—I will give you the present strength—is 1,198 enlisted men, 903 officers, and 1,941 civilians for a total of 4,042. The permanent strength has a total population of 3,586. It is not a large post.

Mr. RILEY. Does that include the inmates of the disciplinary barracks?

Colonel SHULER. No.

ACADEMIC BUILDING

Mr. RILEY. What about the academic building?

Colonel SHULER. On the academic building, Mr. Chairman——

Mr. RILEY. What are you using now?

Colonel SHULER. If I may, I would like to put in the record, Mr. Chairman, the following data which will answer your question and, I believe, will give the committee the full background concerning this academic building request.

The proposed fiscal year 1956 military public-works authorization and appropriation legislation, as submitted to the Congress by the Secretary of Defense, includes $5,433,000 to provide an academic building for the Command and General Staff College.

The building will be three stories, of concrete and steel frame construction, with masonry units, interior and exterior walls, and with concrete floors and a roof deck.

The building will have 300,854 square feet. The construction costs will run about $16.48 per square foot, and will provide in a single building 24 classrooms, offices for the staff and faculty, cafeteria, bookstore,

auditorium and a reading room, instructional-aid shop, and miscellaneous building services and maintenance facilities.

The primary mission of the Command and General Staff College is to prepare selected officers of all components of the Army for duty as commanders, and as members of the General Staff at division, corps, army, and comparable levels.

The academic activities of this college have profound influence on the quality of leadership of the higher brackets of the Army. The Command and General Staff College was originally designed to accommodate a student population of approximately 150 officers. A student load of 1,200 officers is planned for the peacetime Army.

The need for academic facilities is now being met by the use of 11 masonry buildings that were constructed between 1859 and 1911, and spread over 78 acres. Three of these are used for classroom purposes and include a converted gymnasium equipped with movable partitions, a former riding hall, and a former stable. The other buildings were constructed for administrative functions, stables, family quarters, and miscellaneous use.

I would like to add, from my own personal experience in attending the Army War College at Carlisle Barracks, that I personally fully appreciate the need for an adequate academy facility for the top Army schools, because they have such influence on the officers who graduate from these schools. These graduates can better serve their country in their capacity as officers in the Army. I think this is a very greatly needed project.

Mr. RILEY. The Command General Staff is the highest academic Army training; is it?

Colonel SHULER. This is the school for the senior captains, the majors, the lieutenant colonels.

Then we have the Army War College, a senior school at Carlisle Barracks, the National War College located here in Washington, and the Industrial College. These are all in the same family of senior schools of the Army.

Mr. RILEY. Will these other buildings be converted to other purposes or will they be abandoned?

Colonel SHULER. No, they will all be utilized, and in order to save time, Mr. Chairman, I would like to put in the record a statement showing what each of these buildings will be used for, building by building.

Mr. RILEY. That will be fine.

(The information requested follows:)

Upon completion of proposed Command and General Staff College Academic Building (300,854 square feet) activities now housed in 11 existing buildings will be moved into the new academic building. Planned use of 11 vacated existing buildings is as follows:

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Building	Initial use	Current use	Planned use
119	Storage	Book department, Inspector General.	Service and welfare activities.
102	Family apartments	Administrative	Family apartments.
T-801	Gymnasium	Classrooms	Gymnasium.
285	Stable	do	Warehouse.
T-802	Warehouse	Nonresident instruction.	Storage.
T-120	Administrative	Post publications	Salvage.
111	do	Magazine storage	Do.
52	Academic	Academic building	Post headquarters.
302	Riding hall	Classrooms	Classrooms.
83	Administrative	do	Do.
27	Theater	Lecture hall	Theater.

Mr. FORD. How long is the course at Fort Leavenworth?

Colonel SHULER. Essentially it is a year's course; it lasts 10 months but the officers are there for about a year.

Mr. RILEY. When they are assigned there, do they take their families with them?

Colonel SHULER. Yes; that is considered a permanent change of station. I believe the cutoff is about 5 months.

Mr. FOSTER. Yes, sir.

RADIO RECEIVER BUILDING

Colonel SHULER. For the radio receiver building, $54,000, the project is required to provide space for radio receiving facilities to be used in conjunction with the radio transmitter building, $166,000, and will provide emergency teletype typewriter circuits in event of disruption of leased land line circuits or in the event of other emergency. The present facility has seven channels. The new facility will have 10 channels in order to prevent overloading. The present facility occupies approximately 400 square feet in the Fifth Army Headquarters Building at 1600 East Hyde Park Boulevard, Chicago, Ill. The existing space in this Fifth Army Headquarters Building will be converted to administrative use.

Mr. FORD. I notice that you propose the construction of the communications center building, the radio receiver building, and radio transmitter building.

Colonel SHULER. Yes.

Mr. FORD. That is primarily for the purpose of transferring these functions from the Fifth Army Headquarters Building in Chicago?

Colonel SHULER. Yes, to effect economies.

Mr. FORD. I also note in the justifications that the space now occupied by these operations in the Fifth Army Building will be used in the future for administrative purposes.

Colonel SHULER. Yes.

Mr. FORD. Could you give us what those uses will be in the Fifth Army Headquarters?

Colonel SHULER. Mr. Ford, may I furnish that for the record? I do not have that information before me, but I will furnish that for the record.

Mr. FORD. I think it would be well for us to know how this vacated space will be used, from where the various functions will be transferred. I assume they would be transferred from some other space currently used by the Fifth Army.

Colonel SHULER. Of course, the saving that would be effected by the structures at Fort Leavenworth would be mostly by way of more efficient concentration and more efficient equipment and operation.

(The information requested is as follows:)

The 8,000 square feet of floor space to be released by the movement of the Fifth Army Relay Center from Chicago, Ill., to Fort Leavenworth, Kans., is urgently needed by Headquarters, Fifth Army, for administrative space.

The space to be made available is located in the basement of the headquarters building. The planned usage is as follows:

(*a*) Two thousand and four hundred square feet will be utilized by moving the G–2 section's central records, now located in the Chicago Quartermaster Depot some 5 miles distant, to the headquarters building.

(*b*) The remaining 5,600 square feet will be utilized by moving the AG's Holding Section records from the sixth floor to the basement. The space made available by this latter move will be utilized to allocate space to overcrowded staff sections of the Fifth Army Headquarters. Currently the following shortages in space exist:

Staff section:	*Space, square feet*
G–1 and Comptroller	2,200
Engineer	1,300
Surgeon	1,200
Chaplain	300
G–2	2,000
Total	7,000

Mr. FORD. I notice you also set forth here a saving in the way of modernization and utilization of the new radio communications facility.

Colonel SHULER. Yes; it will require less people to operate, and thus will result in savings in pay. Then we should have less costly maintenance, and we will have an annual saving which will be quite large.

Mr. FORD. It is quite a necessary building.

Colonel SHULER. Yes.

Mr. FORD. At the Fifth Army Headquarters.

Colonel SHULER. Yes.

Mr. FORD. I would not like to see them just expand facilities because these are currently occupied.

Colonel SHULER. Yes.

With respect to the radio transmitter building, Mr. Chairman, the project is required to provide space for radio transmitting facilities to be used in conjunction with the radio receiver building and will provide emergency teletypewriter radio circuits in event of disruption of leased land line circuits, or in the event of other emergency. The present facility has seven channels. The new facility will have 10 channels in order to prevent overloading. The present facility occupies approximately 400 square feet in the Fifth Army Headquarters Building in Chicago, and the space will be converted to administrative use.

CAMP LUCAS, MICH.

The next station appears at page 389 of the big book, Camp Lucas in Michigan. The mission of this station is logistic support of antiaircraft units in the defense mission. There is one item, a gymnasium, $145,000, which is to provide recreation for troops stationed at Camp Lucas where we have no such facilities existing at the present time.

Mr. RILEY. What are you using for gymnasium facilities at the present time?

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Colonel SHULER. We have no existing facilities. We are, through the kindness of the high school and the Michigan College of Mining, permitted to make use of the gymnasium facilities when they are not otherwise in use. But that is a bit indefinite. When they are in use, we just do not have anything.

Mr. FORD. What type of construction will you have here?

Colonel SHULER. This will be the modified emergency type, concrete block, 10- to 15-year life.

Mr. FORD. This installation is located precisely where, with respect to the city of Sault Ste. Marie?

Mr. FOSTER. Right on the edge of the city, sir.

Colonel SHULER. It is not a very large installation.

Mr. FORD. What kind of overall facilities do you have there now? I notice there is an antiaircraft installation but what do you have in the way of enlisted men's barracks and other facilities?

Colonel SHULER. Mr. Ford, I can give you some data on that right now.

This installation occupies facilities previously occupied by the hospital formerly at Fort Brady. The existing hospital buildings were rehabilitated in 1950 to provide for one antiaircraft battalion.

The existing structure has a capacity of 654 enlisted men.

The cost to the Government as of June 30, 1949, was land, $567,346; construction, $1,651,000.

Mr. FORD. Do you feel that the gymnasium needs are not being answered?

Colonel SHULER. This program stems from the request of the post commanders in every case, Mr. Ford, and while I must admit that there are normally some eliminations on the way up, I do not believe, when the request came through for Lucas, that there were any eliminations.

Mr. FOSTER. Not at Camp Lucas. I think that the reasoning behind the post commander's recommendation for the gymnasium was that it could be more nearly adapted to all types of recreation than any other single building.

Mr. FORD. What kind of construction would this be?

Colonel SHULER. This would be modified emergency type construction, which will be of concrete block, concrete aprons, concrete cover, 10- to 15-year life, with a good roof on it. Not as heavy as it would be for the permanent 20- to 30-year type.

Mr. FORD. They have pretty rugged weather up there.

Colonel SHULER. Yes. This will be insulated and will meet that condition.

Mr. RILEY. What is the next, Colonel?

FORT RILEY, KANS.

Colonel SHULER. Next station appears on page 391 of the big book, Fort Riley, Kans., and at page 61 of the family housing book. The family housing request for $2,649,000 would be to fund 200 sets of family housing, broken down into 156 noncommissioned officer, and 44 company grade.

There is a total requirement of 2,932 sets; the assets are 698 of which 400 are Wherry, leaving a deficit of 2,234.

The remaining items at Fort Riley that we are requesting to be funded are an aircraft hangar, hardstand for aircraft hangar; conversion of building 296 to salvage warehouse; 2 ammunition igloos; 6 enlisted men's barracks; 4 battalion headquarters barracks; 4 battalion classroom buildings; 4 motor-repair shops, a hardstand for the motor park, motor-park facilities, regimental dispensary, branch post exchange, enlisted men's service club and a theater without stage.

Fort Riley is located 4 miles east of Junction City.

Mr. RILEY. How large is Junction City?

Mr. FOSTER. I do not have the population figures, Mr. Chairman.

Mr. RILEY. Will you insert that information in the record?

Mr. FOSTER. Yes.

Mr. RILEY. Are there any other towns near Fort Riley?

Colonel SHULER. This is the closest town, Junction City, but we will also put in the record any other towns that are near.

(The information requested follows:)

City	Population, 1950 census	Distance from Fort Riley by highway	City	Population, 1950 census	Distance from Fort Riley by highway
		Miles			*Miles*
Junction City	13,462	4	Herington	3,775	30
Manhattan	19,056	13	Chapman	990	13
Ogden	845	3	Abilene	5,775	30

AIRCRAFT HANGAR

Colonel SHULER. The proposed hangar, $449,000, is required for the maintenance of helicopters. The existing hangar of 33,800 square feet will continue in use for fixed-wing aircraft. The Department of the Army helicopter stationing plan has established Fort Riley as one of the installations where helicopter units will be stationed and trained. One helicopter battalion has been assigned to the installation for this purpose and will be equipped with 30 helicopters. In addition, there are 19 other helicopters of the installation assigned to other units making a total of 49 helicopters. There are also 25 fixed-wing aircraft assigned.

For the hardstand, $53,000, for the aircraft hangar, an 8-inch concrete hardstand, including lighting, water for fire fighting and washing purposes is requested. The Army helicopter stationing plan has established Fort Riley as one of the stations where helicopter units will be stationed and trained. One hangar is included in this program. Hardstands are required in connection with this hangar for fueling, outdoor servicing and tie-down of 49 helicopters to be assigned to the station. It is estimated that 100 square yards are required for each helicopter or a total of 4,900 square yards with the balance of the area to be utilized for taxi purposes.

CONVERSION OF BUILDING 299

This project, in amount of $55,000, is required to provide facilities for the receipt, storage, and disposal of salvage material in order to permit efficient conservation, utilization, and segregation of various

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materials. The monthly volume book of transactions is indicated as follows:

Redistribution within the area, $930,244;
Transfers to others, $59,187;
Donations, $73,187;
Sales, $183,143.

The gross tonnage disposed of by the above transactions are 26,081 tons. Approximately 13 percent of the original value of the property is regained through sales. Existing facilities consist of three frame structures which are in such extremely poor structural condition that they constitute a hazard to persons employed therein. They are beyond repair and will be demolished.

AMMUNITION IGLOOS

For two ammunition igloos, $75,000. This project is required to provide facilities for the storage of 8,500 cubic feet, 1,318 square feet, of rocket ammunition; 1,200 cubic feet or 186 square feet of separate loading artillery ammunition, and 25,000 cubic feet of packaged artillery and mortar ammunition. The construction of these two igloos will permit safe storage of most of these explosives which are now stored in the open. The existing facilities of 7,879 square feet are filled to capacity with high explosive ammunition while 8,679 square feet are used only for small caliber ammunition, due to their condition. The latter are the steel type igloos which have deteriorated to the extent that repairs are impracticable. These igloos will be demolished. The training directives require 45 days of supply to be maintained.

Mr. RILEY. The airfield in connection with Fort Riley is near what other post?

Colonel SHULER. At Fort Riley—this is 1 of 2 posts where Army aircraft are assigned for unit training. In other words, the specific units trained are Army aviation units.

Mr. RILEY. What is the name of the airfield there?

Mr. FOSTER. Marshall Field.

Mr. RILEY. That is an Army field?

Colonel SHULER. That is right.

ENLISTED MEN'S BARRACKS

These, in amount of $3,498,000, will consist of reinforced concrete footings and foundations, concrete frames, concrete block exterior and interior walls and concrete floors and roof slab.

The project is required to house a portion of the enlisted men at Fort Riley in permanent barracks. Although this installation has a requirement based on peacetime strength for 13,022 spaces, only 1,896 exist, and 1,578 are under construction. Most of the enlisted personnel are housed in temporary barracks which are in relatively good condition structurally, but do not provide privacy, comfort, or recreation of permanent barracks. The existing temporary barracks have a capacity of 15,519 spaces, and will continue in use and be retained for mobilization requirements.

BATTALION HEADQUARTERS BUILDINGS

Four Battalion Headquarters buildings, $168,000 with reinforced concrete footings and foundations, concrete frame, concrete block exterior, and interior walls and concrete floor and roof slabs.

The barracks approved in the fiscal year 1955 program and are now under construction, and those in this program constitute 1 regimental area consisting of 4 battalion areas. This project is required for administration and command functions of each battalion. No other buildings exist within 3 miles of this area. If the project is deferred, it will be necessary to utilize space in the new barracks for this purpose.

BATTALION CLASSROOM BUILDING

The next item is for four battalion classroom buildings, $211,000, and the project is required to supply training and educational facilities for troops to be assigned to the enlisted men's barracks now under construction. The current training programs require indoor study and classroom work in addition to field training. There are no permanent buildings suitable for use as classrooms at the installation. If this project is deferred, it will be necessary to utilize space in permanent barracks or other structures for classroom study.

MOTOR REPAIR SHOP

These shops, $286,000, are required to provide the facilities for the repair and maintenance of vehicles for one infantry regiment consisting of 25 tracked combat vehicles; 333 wheeled motor vehicles; 171 towed trailers, For the effective control of the motor park and to reduce lost time in travel, it is necessary that the motor park be located in the regimental area. No motor park presently exists within 5 miles of this regimental area.

HARDSTAND FOR REGIMENTAL MOTOR PARK

The hardstand, $155,000, will be a 2-inch asphalt concrete surfacing over 6-inch stabilized base course. The hardstand is required to provide a hard surfaced parking area for the vehicles assigned to the regiment, and for minor repairs and servicing if weather permits. The hardstand does not exist now in the area where the shop which it supports will be located. The deletion of this project would result in parking these vehicles on unpaved areas which may cause an increase in maintenance and repair costs.

MOTOR PARK FACILITIES

These will consist of two oil houses, dispatch office, covered grease rack, 3 uncovered grease racks and 10 wash platforms. This project, $74,000, is required to provide facilities for the fueling and servicing of 25 track combat vehicles, 333 wheeled motor vehicles, and 171 towed trailers of the unit occupying the new regimental area. There are no such facilities there now, and if it is deferred, it will be necessary to service these vehicles in the open or under tentage.

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REGIMENTAL DISPENSARY

The regimental dispensary, $119,000, is required to provide medical facilities for the treatment and care of approximately 4,000 enlisted men to be housed in the new barracks located over 3 miles from the nearest medical facility. If it is not provided, it will be necessary to establish a dispensary in one of the new barracks.

BRANCH POST EXCHANGE

A branch post exchange, $72,000, is required to provide service for approximately 4,000 military personnel assigned to the new regimental area. No post exchange exists within 3 miles of these barracks. The exchange will be located within reasonable distance from these barracks to permit personnel to purchase merchandise without inconvenience. Unless this is provided, it will be necessary to establish an exchange in one of the new barracks.

ENLISTED MEN'S SERVICE CLUB

The enlisted men's service club, $462,000, is required to provide recreation for approximately 4,000 enlisted men to be housed in the new area some 3 miles from other similar buildings. The existing and similar facilities are of a mobilization type and are only sufficient for the area in which they are located. This is required to improve the morale of the enlisted men.

Mr. FORD. In connection with the enlisted men's barracks, there are several auxiliary projects that apparently are not as distant from the existing facilities as those where you plan to construct the new enlisted men's barracks.

Colonel SHULER. Yes.

Mr. FORD. Why are you apparently moving the barracks of the quarters from what I gather to be the central location, to the new location?

Colonel SHULER. I believe the answer to that lies in the master planning of the installation, Mr. Ford. In the master plan, we try very conscientiously, Mr. Ford, to utilize fully what is existing on the installation.

In many cases, due to developments in our technology, and in our modern Army equipment, we do have to master plan our posts differently than they have been in the past, and unfortunately it does result many times in our having to move buildings, or tear them down to make room for new construction. I presume that is the case here, but we will check on the master plan and provide definite information for the record.

Mr. FOSTER. Mr. Chairman, in addition, the permanent facilities existing are small in number and our postwar construction represents an expansion over some of the posts.

If you will look at this copy of the master plan, you will note the buildings outlined, but not colored in, represent buildings which were not in existence when this plan was developed. These are all barracks.

Mr. FORD. Existing barracks?

Mr. FOSTER. No; these are future planned barracks. These areas that are colored in black indicate the existing facilities at the post,

which you will note are quite small. These [pointing] are the old existing barracks. Obviously, there is no way in which this area could be expanded to take care of this complement of barracks. Over here on this map you will note the family quarters.

Mr. FORD. Those are the proposed for the 1956 fiscal construction?

Mr. FOSTER. That is correct.

Mr. FORD. From this distance here [indicating] and over to there is about 3 miles?

Mr. FOSTER. About a mile and a half. Here is a half mile approximately and from this distance to the other would be about 3 miles.

Mr. FORD. I notice the justification, in reference to the enlisted men's service club, states that the project is required to provide recreation for approximately 4,000 enlisted men to be housed in a new area 3 miles from other similar facilities.

Mr. FOSTER. That would be this area on this side of the map. Here is the enlisted men's club. It is to the extreme south end of the post.

Mr. FORD. Where do you plan to put the new enlisted men's club; where would that appear on the master plan? Where is the new housing going to be?

Mr. FOSTER. The new barracks are colored in red in here [indicating].

Mr. FORD. Are these barracks—what are these barracks here for [indicating]?

Mr. FOSTER. That is a future increment.

Colonel SHULER. In order to complete the permanent station. We master planned the complete station.

Mr. FORD. Why would you propose, in 1956 fiscal year, a barracks construction program which is further away from here [indicating], further away than at this point?

Colonel SHULER. We will get the information and supply it for the record.

Mr. FORD. I think it should be in the record.

Colonel SHULER. Yes. We will put a statement in the record showing why we are now building a new barracks area at Fort Riley in this particular location.

(The information requested follows:)

The Fort Riley enlisted strength for permanent or peacetime planning was increased from approximately 7,000 to 16,077 in 1953. This increase necessitated a major change in the installation master plan (the plan in the brochure shown to the committee is the old plan based on approximately 7,000 enlisted strength). Development of a new barracks area was initiated for following reasons:

1. There is not sufficient area above flood stage in vicinity of existing main builtup area to accommodate a major expansion. It is desired to retain existing temporary barracks for mobilization requirements.

2. Administrative and training considerations make it desirable to house all divisional troops in one general area.

3. New barracks area (approximately 3 miles distance) is the closest area to the main post which is topographically suitable to accommodate a large barracks development on land above flood stage.

THEATER

Colonel SHULER. The theater without stage, $331,000, is required for training and recreation for 4,000 enlisted men to be housed in the new area located approximately 4 miles from any existing theater. Except for the main theater, all other theaters are of a mobilization

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type and only adequate for the areas in which they are located. The 3 mobilization-type theaters have a total area of 32,500 square feet, and 2,670 seats. They are in good condition and will continue in use. Deferment of this project will have a definite effect on the morale of the enlisted troops.

Mr. RILEY. I notice you have no theater. What are you using for a theater out there now?

Colonel SHULER. Except for the main theater on the post, all of the theaters are of the mobilization type and serve the area in which they are located. They are of the mobilization type. As I indicated, these will continue in use.

However, this request is for a permanent type theater which will increase the morale of the enlisted men. It will give them a permanent structure which is needed to decrease our deficit of 3,000 seats in our total permanent requirement.

FORT SHERIDAN, ILL.

The next station is at Fort Sheridan, found on page 406 of the large book and page 54 of the Family Housing Book.

FAMILY HOUSING

We are requesting 100 family quarters, $1,268,000, noncommissioned officer; we have a requirement of 414 quarters at this station, assets are 221, of which 100 are Wherry, leaving a deficit of 193.

This request is 100 percent replacement of inadequate temporary substandard quarters, which are presently occupied by people we want to move into better sets of quarters.

COLD STORAGE WAREHOUSE

The other item at Fort Sheridan is a cold storage warehouse, $260,000. This particular cold storage warehouse is required to support a number of satellite installations which include supply of frozen produce to Fort Sheridan; Headquarters, Fifth Army, Chicago; Chicago Quartermaster Depot; 51th AAA Brigade, Chicago; O'Hare Air Force Base; AC&W, Elkton, Wis.; Traux Air Force Base, Wis.; Camp Haven, Wis. In addition to the permanent military strength of 1,804 at this station, approximately 6,000 additional military personnel of these satellite installations are also served from this facility. Four buildings are now being used. Space is inadequate since only 4,713 square feet exist against a requirement of 12,040 square feet. Temperatures cannot be maintained. 738 tons of perishables are processed each month, one-third of which required storage from 3 to 7 days. Balance required storage up to 6 weeks. Existing facilities consist of one 510 square feet building erected in 1890, one 240 square feet building erected in 1941, one 1,953 square feet building erected in 1938, and one 2,410 square feet building erected in 1944.

Mr. RILEY. Is Fort Sheridan near any city or town?

Colonel SHULER. It is not too far from Chicago.

Mr. FORD. It is about 6 miles north on the lake.

Sixth Army Facilities

Camp Hanford, Wash.

Colonel Shuler. The next station, Mr. Chairman, is in the Sixth Army and is Camp Hanford, in the State of Washington. The one item at Hanford is for a river ferry landing facility, $167,000. This is to facilitate the supply of maintenance and other items for antiaircraft protection at Camp Hanford. The putting into operation of this ferry will materially shorten our travel distance for the vehicles which have to provide logistic support of the antiaircraft defense. It will save us money in the long run. It will amortize itself over a reasonable period of time, and it will save wear and tear on the vehicles.

All supply and maintenance items for antiaircraft and missiles sites north of the Columbia River must be transported by ferry which is now operated at the old Hanford townsite to the east side of the area served. Each vehicle travels 38 miles per trip, or a total of 6,640 vehicle miles per day. By moving the ferry crossing to a more central location, vehicle travel will be reduced by 1,120 miles per day; in addition, savings of $18,000 per year could be realized on maintenance of existing landing facilities which require constant regrading due to the shifting of the ramps.

Fort Lewis, Wash.

The next station is Fort Lewis, Wash.

FAMILY HOUSING

We are requesting $5,381,000 at this station for 400 sets of family quarters. This station is 16 miles southwest of Tacoma, the nearest town.

The quarters are broken down as follows: 300 noncommissioned officers; 90 company grade, and 10 field grade.

The requirement at Fort Lewis is 8,981; the assets are 1,336, with a deficit of 7,645.

The additional items at Fort Lewis are as follows: A storm drainage system, hardstand for regimental motor park, a dental clinic, 23 ammunition igloos; 3 regimental dispensaries; a regimental chapel; refrigerated warehouse and central meat-cutting plant, field maintenance shop, engineer; hardstand in connection with the engineering field maintenance shop; a theater without stage, 2 branch post exchanges, a classroom building, enlisted men's service club, and 10 enlisted-men's barracks.

STORM DRAINAGE SYSTEM

The storm drainage system consists of 84-inch reinforced concrete pipeline, open channel, intake, distilling basin and culvert and the modification of the utility system, at total cost of $161,000.

No storm drainage outfall exists to serve South Fort Lewis. This project is required to complete a storm drainage outfall system for the Fort Lewis Reservation. At present the surface drainage is diverted into Hanna Lake located near the south entrance to the installation. It is proposed to drain Hanna Lake by constructing an outfall, the

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drainage of which will be diverted into a storm drainage system already completed and which empties into Puget Sound.

During the extreme wet season, the water level of Hanna Lake rises to the extent that Highway 99 is flooded with depths of water reaching 6 feet, endangering and delaying traffic. The deferral of this project would prevent the proposed construction work on the main road by the Department of Highways of the State of Washington.

HARDSTAND

The hardstand for regimental motor park No. 2, $127,000 is required to complete the partially constructed motor park facilities within the regimental motor park No. 2 area. Public Law 155 82d Congress authorized construction of motor repair shops, grease racks, and other supporting facilities for this motor park which is to be utilized for the organizational vehicles of troops now quartered in permanent barracks recently completed. This motor park is designed to service approximately 500 vehicles.

DENTAL CLINIC

The dental clinic, $330,000, is required to provide dental services for 6,700 troops assigned to a new barracks area. The existing temporary dental clinic of 6,600 square feet is a mobilization type structure, erected in 1942 and has a rated capacity of 25 chairs; it is located 1¾ miles distant and lacks 5,400 square feet of providing sufficient space to meet the present requirements.

The proposed facility is to be constructed adjacent to the recently completed troop housing area. There are no dental clinic facilities existing in the immediate vicinity of this new barracks area. The existing temporary facility, located central to the station, will be retained primarily to serve military dependents and civilian personnel until the excessive maintenance costs justify replacement.

AMMUNITION IGLOOS

The 23 ammunition igloos, estimated cost $543,000, are required to provide ammunition and chemical storage facilities for 7,313 tons of explosives, authorized for this installation; 3,400 tons are required as a standby reserve, and 3,913 tons are for training purposes which require the daily issue of approximately 50 tons. The temporary storage of 24,800 square feet for ammunition must be discontinued due to the location within safety limits, endangering personnel employed in the nearby industrial and warehouse areas. The existing igloos will be retained for materials storage other than ammunition until construction of permanent facilities.

REGIMENTAL DISPENSARIES

Three regimental dispensaries $329,000 are requested. Two dispensaries are required to provide medical treatment and care and emergency treatment for approximately 6,700 enlisted men to be assigned to the new regimental areas 1 and 2. The existing temporary dispensaries were built in 1941, the nearest being located approxi-

mately six-tenths of a mile distant, and are fully utilized. The existing temporary facilities will be retained for continued use in support of interim and mobilization requirements. One regimental dispensary is required to provide medical treatment and care, and emergency treatment for approximately 2,630 enlisted men to be assigned to 10 enlisted men's barracks now under construction in the division artillery area.

No facility exists in this area. The nearest facilities of this type are temporary buildings over 1 mile distant and they are fully utilized. These projects are considered essential and their deferral will have an adverse effect on the enlisted men's personnel.

REGIMENTAL CHAPEL

A regimental chapel, $159,000, is requested to provide facilities for religious worship for 3,300 enlisted men assigned to new barracks in a new regimental permanent housing area. No such chapel exists in the housing area and barracks space must be utilized for this activity, thus reducing the housing capacity. The nearest temporary chapel is at least three-fourths mile distant and is used to capacity by troops living in temporary barracks. Existing temporary chapels are to be retained for interim or mobilization use until excessive maintenance costs or replacement with permanent facilities require their removal.

REFRIGERATED WAREHOUSE

The refrigerated warehouse, $343,000, with central meat-cutting plant is required for meat receiving, storage, cutting, and issue and for fat rendering. Department of the Army policy requires that all stations within the Zone of the Interior will use carcass beef. There exists a limited amount of refrigerated space, 19,440 square feet, with no meat-cutting facilities available, and it has been necessary to purchase boned beef with an increase in meat costs of approximately $280,000 per year. There are no other Government-owned facilities available in the area, and commercial facilities would require more than twice the normal handling and labor and involve daily transportation of perishable foodstuffs for distances from 20 to 60 miles. The construction of this project will require the removal of one existing temporary warehouse.

FIELD MAINTENANCE SHOP (ENGINEER)

The field maintenance shop, $766,000, is required to provide facilities for repair of 3,357 items of equipment annually, of which 1,731 are major units. Items include TO/E and TA depot operating, and R and U equipment located at Fort Lewis, Mount Rainier Ordnance Depot, Madigan Army Hospital, and Yakima training center. Field maintenance is presently accomplished in a permanent organizational motor repair shop, and a gun shed, with a total floor area of 29,200 square feet. These structures do not have the overhead clearance required to accommodate cranes, shovels, and similar large equipment. The nearest available commercial facilities which could accomplish this type of work are in Seattle, a distance of approximately 60 miles from Fort Lewis, the use of which would incur transportation costs

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estimated at $180,000 per year. The facility now being utilized for this function will revert to its originally intended use, as an organizational motor repair shop, in support of the existing and future training mission of personnel housed in the adjacent permanent barracks.

HARDSTAND—ENGINEER FIELD MAINTENANCE SHOP

The hardstand for the engineer field maintenance shop, $62,000, is required to provide for a minimum of maintenance if weather permits, and parking for approximately 76 items of heavy equipment per day. Parking requires an average of 35 square yards for each item of equipment while the remainder is required for maneuvering and traffic lanes. The rigid hardstand required around the shop is to permit maneuvering and short turning of equipment without damage to pavement, while the flexible pavement in the yard areas is to be used for maintenance and parking. Hardstand for this shop will fulfill all mobilization requirements and will not have to be expanded later.

THEATER

The theater without stage, $335,000, is required to provide recreation and training for approximately 6,700 EM assigned to new permanent barracks in regional areas Nos. 1 and 2. No theater exists in the new area, the nearest permanent theater is located over 1.5 miles distant. One temporary theater is located three-fourths of a mile away, but is fully utilized. Deferral of this project will have an adverse effect on the morale of enlisted men.

BRANCH POST EXCHANGES

Two branch post exchanges, $142,000, are required to provide post exchange facilities for 6,600 enlisted men, assigned to recently completed barracks in two new regimental areas and will replace present activities located in barrack spaces. Other similar facilities are located ¾ to 1½ miles away and are required to serve personnel in areas in which they are located. No such facilities are located in the new locations. Existing temporary facilities will be retained for interim use until excessive maintenance costs or permanent construction siting require their removal.

CLASSROOM BUILDING

A classroom building, $58,000, is required to provide educational training facilities for one battalion in the division artillery area. No classrooms exist in this area and the nearest facility, located only a few hundred feet distant, is fully utilized by troops housed in the regimental area No. 2. If this facility is deferred, space in barracks must be used for classroom purposes.

ENLISTED MEN'S SERVICE CLUB

An enlisted men's service club, $443,000, is required to provide off-duty recreation for 6,700 enlisted men assigned to recently completed barracks in two regimental housing areas. These troops are presently without this type of recreational center, and the nearest

facility is over 1¾ miles distant. Two existing service clubs are of temporary construction and fully utilized by troops housed in nearby areas.

ENLISTED MEN'S BARRACKS

This project, in amount of $6,096,000, is required to provide permanent quarters for enlisted personnel now housed in 65 temporary wood frame barracks, which were constructed for emergency use at the beginning of World War II. These barracks are in poor condition and rehabilitation will require new exterior asbestos wall siding, new floors, lining of interior walls, additional electrical outlets, painting, heating changed from coal to oil. New barracks will be located adjacent to existing permanent facilities. Existing temporary barracks will be retained for interim use or until permanent construction or excessive maintenance require removal.

Mr. RILEY. Are any of these facilities requested for replacement of existing facilities?

Colonel SHULER. I would say that the majority of them are replacement for temporary existing facilities. There are some additions. I would say that the 23 ammunition igloos are probably additions, not replacements. The storm drainage system is something new; that is, we do not have an adequate system there now. But the bulk of them are replacement facilities.

FAMILY HOUSING

Mr. RILEY. Do you have any community support there for your housing?

Colonel SHULER. We have very little. I have been stationed at Fort Lewis twice, and short of Tacoma, about the most you have are the autocourt type of facilities, and very little adequate residential housing. The other city, Olympia, is ever further away, on the other side of Fort Lewis than Tacoma. We do have 1,096 sets of community quarters occupied by the people of Fort Lewis, and considering the size of the post, that is not very many. If we had an adequate town closer by, we would occupy more.

Mr. RILEY. Are the community-type facilities substandard or are some of them pretty good?

Colonel SHULER. I would say, sir; that the ones we are occupying are fairly good. And of course, you have to consider the quarters allowance. What you could get for $70 a month, compared with the man who can use a rental allowance up to $135 a month.

(Off the record discussion.)

Colonel SHULER. In connection with Wherry housing, due to the arrangement that exists at Fort Lewis, if we were to build Wherry housing at that Fort, we would in effect have to give up the land; that is, title to the land.

Mr. FOSTER. Title to the reservation.

Mr. FORD. Why is that?

Mr. FOSTER. There is a clause in the deed to the effect that the State of Washington reserves title to the land and the lawyers have interpreted that clause as requiring a reversion of the entire reservation if any portion of it is used for Wherry housing.

Mr. MILLER. Where it is being used for military purposes?

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Colonel SHULER. The Wherry housing is a sponsored-type proposition. They are not public quarters, although they are occupied by the military.

Mr. MILLER. And that is the reason why you do not have any Wherry housing there?

Colonel SHULER. That is the reason why we do not have any Wherry housing at Fort Lewis.

Mr. RILEY. I am a little bit surprised that the Government would accept a deed with such a restriction in it.

Mr. FOSTER. I do not know how far back that goes, Mr. Riley.

Mr. MILLER. To about 1917?

Colonel SHULER. I think about 1917.

Mr. MILLER. It was a World War I emergency and they probably wanted to——

Mr. RILEY. Will you take up the next station, colonel?

PRESIDIO OF MONTEREY, CALIF.

Colonel SHULER. The next station is Presidio of Monterey, page 426 of the large book, where we are asking for 2 items, an academic building and a student dormitory.

I would like to state that the Army considers this a very important mission at Presidio of Monterey. It is the conducting of personal instruction in 24 foreign languages and we must use highly specialized methods of teaching because we try to teach these officers, incidentally their wives, too, these foreign languages in a very short period of time prior to their service in foreign countries.

ACADEMIC BUILDING

Th academic building, $601,000, will be of reinforced concrete footings, foundation, and frame; masonry block walls. The interior partitions will be of removable metal type. The building will include 73 classrooms, 35 faculty offices, auditorium, study seminar, latrines, utility closet, corridors, stairwells, and heating plant with 36,864 square feet.

The permanent military strength is 1,503. Of these, 1,200 are students. However, the present enrollment is 1,663 students. It is expected that the enrollment of students will increase. These requirements can only be met by converting faculty offices into classrooms and moving some of the faculty into warehouse space. Existing classrooms and temporary wood-frame buildings, built from 1902 to 1946, have been converted from barracks and storehouses. They are located in widely separated areas. The buildings are in such poor condition that $27,000 is being spent currently for repairs to floor coverings. Existing temporary facilities consist of 285 classrooms, 400 faculty and administrative spaces. The school course covers periods of 6 months to 1 year. The existing facilities willl be retained for interim and mobilization requirements. The deferral of the project will result in a declining degree of efficiency in operation and in instructions.

STUDENT DORMITORY

The student dormitory, $1,277,000 is required to provide housing conducive to homework study for students attending the Army Language School. Requirements are based on a permanent strength of 1,105 enlisted students. Of this total approximately 225 will be authorized family quarters, leaving a total of 880 permanent spaces required. This project will provide one-half or 440 spaces of the total required. These quarters are designed to permit use of sound recordings, speech drills, and record players, with a minimum of disturbance to other students. Existing facilities consist of temporary wood frame barracks, built during 1903 and 1942, in fair to poor condition which will house 1,430 men. The new dormitory will replace two 70-man temporary barracks built in 1903 and six 52-man barracks built in 1942. Currently $27,000 is being spent for repairs. In order that the present increasing student load—now 1,663—may be housed, it will be necessary to convert BOQ's into dormitories and permit bachelor officers to live off the post. Deferral of this project will result in a declining rate of language proficiency for students. Existing facilities will be retained for interim use as long as the requirement exists.

Mr. MILLER. What is the student population at Monterey?

Colonel SHULER. The student population is 1,663, and we expect it will increase.

Mr. MILLER. And the dormitory is to house these students?

Colonel SHULER. Yes, sir.

(Off the record discussion.)

FORT ORD, CALIF.

Colonel SHULER. The next station is Fort Ord, beginning at page 429 of the larger book and the items are as follows:

Post chapel, $491,000, with religious educational facilities; two regimental dispensaries; main entrance road, branch post exchange, regimental chapel, and theater without stage.

POST CHAPEL

Mr. RILEY. I notice you request a post chapel with religious educational facilities. What are you using there now? My recollection, based on my visit out there some 2 years ago, is that Fort Ord has a good many permanent buildings.

Colonel SHULER. There is no permanent chapel at Fort Ord at the present time. There is an existing temporary wood frame regimental type chapel with 3,552 square feet with 342 seats, which is now being used for some of the religious functions. The temporary chapel lacks sufficient seating capacity and facilities for religious educational programs. It is located about 1¾ miles from the new housing area. This would give us 600 seats of a total requirement of 1,200.

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REGIMENTAL DISPENSARIES

Two regimental dispensaries, $221,000, are required to provide medical care and treatment for 8,153 enlisted men in barracks recently completed in a new housing area. No permanent dispensary building exists in this new area. The existing temporary dispensaries, buildings T–3012 and T–2231, are located 2 miles away and building T–1561 is located 1¼ miles from the new area. The approval of the project will release building No. 4780 to its original use as a two-classroom building. The construction will not require demolition or relocation of any existing facility.

The three temporary structures will be retained to supplement existing facilities required to support the interim strength of this installation.

MAIN ENTRANCE ROAD

Mr. RILEY. I notice you are requesting a new main entrance road. Do they not have a pretty good road system there now?

Mr. FOSTER. The main entrance to the post, Mr. Chairman, is a very dangerous one. It comes in from one of the very busiest highways without the benefit of even a traffic circle and we have had a number of bad accidents there.

Mr. RILEY. That is right off U. S. 101; is it not?

Mr. FOSTER. That is right.

Mr. RILEY. That being the main coast highway.

Mr. FOSTER. That is correct, Mr. Riley. The proposed new road estimated cost $97,000, is required to provide a grade separation for the main entrance and exit from the installation and is in consonance with the proposal for realinement of State Highway No. 1 along the entire western boundary of the reservation. Traffic counts taken in November 1954 indicate that 17,217 motor vehicles enter and leave this installation every 24 hours. Of this total approximately 1,500 vehicles pass the North Bay View housing project during peak hours in morning and afternoon on Gigling Road. If the proposed new access road is constructed, it will make possible the closing of Gigling Road to through traffic and remove a definite hazard adjacent to the North Bay View housing project. This road is proposed as the main entrance for the entire installation serving both the old and new areas and will terminate at the new proposed permanent gatehouse which will be the control and check for all vehicular and pedestrian access or egress.

BRANCH POST EXCHANGE

Colonel SHULER. The next item, a branch post exchange, for which we are requesting $68,000, is essential to provide exchange facilities for one training regiment of approximately 4,000 enlisted men assigned to new barracks in the permanent troop-housing area. With the exception of a small exchange provided in the basement of one of the regimental headquarters buildings, there are no exchange facilities for troops in this area. The nearest temporary snack bar is located one-half mile, a regimental-type exchange three-fourths mile, and the main PX store is 1½ miles. This lack of exchange facilities in the new housing area and distances to existing PX's is not conducive to good morale and is resulting in the loss of approximately $8,000 per month in revenue which would normally accrue to the welfare fund.

REGIMENTAL CHAPEL

We are requesting $171,000 for a regional chapel. This will provide 1 of 2 chapels that are required for use by 2 training regiments of approximately 8,000 enlisted men quartered in the new permanent barracks. The nearest regimental-type chapel is located 1 mile from the permanent troop-housing area. Existing temporary wood-frame type chapels (342 seats each) are all located in the old cantonment area and are not available to troops quartered in the permanent area. These temporary chapels will be retained for continued use, as required, in support of interim and mobilization troops that may be housed in the existing temporary barracks.

THEATER

Mr. FORD. The amount requested for the threater is $359,000. I wonder if you could amplify the record on that a little more fully? I have noticed in 2 or 3 instances that we have had theaters requested involving amounts of $350,000 in certain areas, up to $358,000.

Colonel SHULER. I might say on that, Mr. Ford, that the reason we would like to have a theater on the post is that this is a post which is not adequately supported by a large city directly nearby where troops can go to the theater. In the case of Fort Ord, while there are several towns near Fort Ord, such as Salinas and Monterey, the facilities are limited. We like to have the enlisted men provided recreation on the post, rather than have them run into town for recreational activities.

Mr. MILLER. I think it might be well to put in the record also that in these posts, the fact that the theater also serves other purposes. Most of these theaters in our military instalations perform a very valuable function, in addition to entertainment; and they are not just entirely for morale purposes, but they are also used for auditoriums for training which goes on all of the time.

Colonel SHULER. That is right.

Mr. RILEY. In connection with this particular station as I recall, the only way you can go anywhere, you have to travel over one of the most congested highways in the United States, and it is extremely dangerous.

Colonel SHULER. That is correct.

Mr. FORD. The only point I had in mind was the statement in the justification which says that—

> The 3 existing emergency-type theaters totaling 2,830 seats are located 1½ miles, 1¾ miles, and 2¼ miles, respectively, from the new permanent troop-housing area.
>
> If this project is deleted, trainees would be denied the privilege of attending shows during the week due to the travel time involved.

I just do not think that is a very sound statement.

Colonel SHULER. Mr. Ford, they have to walk. We cannot provide transportation for hauling hundreds of men after duty hours. It involves too much of an administrative headache, dispatch problems, and so forth. They have to walk 2¼ miles, which, when you consider the fact that it involves a round trip of 5 miles—I do not think that I would personally like to walk that much just to attend a theater. I agree with you, sir, that the case would be better if the distance were

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more, but on the other side of the picture, I do feel that we are, I hope, entitled to a permanent structure in the way of a theater, just as much here as we are on any other permanent installation.

We do not have any permanent theater on this post now, which is the main argument for this project.

Mr. FORD. When these theaters are constructed, what kind of equipment is put in; cinamascope, panorama, futurama—what is it?

Colonel SHULER. I would like to ask Mr. Zackrison, the engineer who supervised the design of these buildings, to answer that question, Mr. Ford.

Mr. ZACKRISON. These buildings are constructed to provide various types of presentations.

Mr. FORD. Are they equipped with the additional mechanical facilities?

Mr. ZACKRISON. That is not our part of the construction program; that is provided by the Army Motion Picture Service that handles the projection machines, and is not included in the construction cost.

But, there would be an increase in cost of equipment to some degree, Mr. Ford, I am sure.

Colonel SHULER. However, that is not to be appropriated for in this request; that is not in the MCA request.

That is furnished equipment by the Army Motion Picture Service.

Mr. FORD. That is all.

PRESIDIO OF SAN FRANCISCO, CALIF.

Colonel SHULER. The next station is on page 436 of the justifications, the Presidio of San Francisco, where we have one request for a quartermaster petroleum dispensing station in the amount of $144,000.

The quartermaster petroleum dispensing station is required to provide centralized servicing and refueling facilities for approximately 1,500 vehicles based at this installation for operational support. Existing facilities, built in 1928, were designed to support 500 vehicles and consists of three 10,000 gallon storage tanks and two metering pumps. Due to increased number of vehicles to be served, there is a time loss of 30 to 45 minutes per vehicle and driver. Existing tanks are rusted and pitted and leak. Office space is in a sheet iron shack. Packaged POL items are stored in a lean-to shed with sheet metal roof which is so small that drums must be stored in the open with salvaged canvas covering for protection.

Existing facilities will be demolished to provide a site for the proposed project.

Mr. FORD. If there are no questions, we shall proceed to the next item.

UNITED STATES DISCIPLINARY BARRACKS, CALIFORNIA

Colonel SHULER. The next station, Mr. Chairman, is the United States disciplinary barracks, at Santa Barbara County, Calif., 5 miles northwest of Lompoc, Calif.

FAMILY QUARTERS

The items requested are 50 sets of family quarters, $663,000, and these are broken down, sir, as follows: 38 noncommissioned officers, and

12 company grade. The total requirement at this station is 131. We have no assets, and therefore, we have a 100 percent deficiency.

These are a military necessity, sir, due to the requirement for many people to be on the base due to the United States disciplinary barracks mission.

CHAPEL

The other two items requested at this station include a post chapel with religious educational facilities, and a post exchange.

The proposed chapel, $125,000, is required to provide religious facilities for 733 military personnel and their dependents. There is no chapel at this installation. Religious services are now conducted in a 960 square foot prefabricated building which cannot accommodate the population desiring to attend services, and has no religious educational facilities. The presently used building was originally designed for storage, and due to recent expansion of the industrial activities, is urgently required for storage.

Mr. FORD. How many officers and enlisted men are stationed here?

Colonel SHULER. The present strength, sir, is 62 officers, and 671 enlisted men, and 212 civilians, for a total of 945. The permanent planned peacetime Army is 50 officers, 450 enlisted men, and 268 civilians, for a total of 768.

Mr. MILLER. How many prisoners do you keep there?

Mr. FOSTER. This is a prison which will house 1,551 prisoners, Mr. Chairman. It was built in 1948 and 1949 at an estimated cost of $7.3 million.

Mr. MILLER. It is quite new?

Colonel SHULER. Yes, sir. Off the record.

(Discussion off the record.)

POST EXCHANGE

Mr. Chairman, this project in amount of $59,000 is required to provide exchange services for the personal needs of 500 military personnel, and their dependents. Existing post exchange is a 2,980 square foot temporary building, built in 1946, which has outlived its original life expectancy of 5 years.

The limited space available does not permit complete exchange facilities. This exchange is a branch of the Fort Ord exchange, located 215 miles distant, and therefore, requires greater storage space than the average post exchange.

The siding and roof of the existing temporary building are in poor condition, and will require major repairs, estimated to cost $14,450, within a year.

Three temporary buildings, including the existing exchange, will be demolished upon approval of this project.

YUMA TEST STATION

Mr. RILEY. We shall now proceed to consideration of the next item.

Colonel SHULER. The next station is listed in the family housing book at page 69, the Yuma Test Station, where we request $709,000 for the funding of 50 family quarters.

The statistics are listed there. We have a requirement for 115 sets of quarters. We have 58 assets and have a deficiency of 57.

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This is a very humid and warm location, Mr. Chairman, and these facilities are 100 percent new assets for the station.

Mr. RILEY. Is this a remote station?

Colonel SHULER. This station is located near Yuma, Ariz., sir, and the distance is about 28 miles. It is located northeast of Yuma, Ariz.

Mr. RILEY. All right.

Colonel SHULER. I would call it semi-isolated, sir, at least.

Mr. RILEY. Are there any questions?

Mr. FORD. What is the personnel situation there at the present time?

Colonel SHULER. The personnel situation, sir, is that we have 48 officers, 604 enlisted men, and 229 civilians, for a total of 881.

The permanent strength calls for 48 officers, 380 enlisted men, and 227 civilians, for a total strength of 655.

That station, sir, is a research and development station which involves all of the technical services of the Army. Every one of them has a research and development center there, so to speak, with projects going on. It is the hot-weather test area of the Department of the Army.

Mr. RILEY. If there are no further questions, we shall proceed to consideration of the next item.

ARMED FORCES SPECIAL WEAPONS PROJECTS

Colonel SHULER. Mr. Chairman, this brings us to the last section of the book, which has to do with Armed Forces special weapons projects, and with your permission I would like to approach it in this manner:

There are a number of bases involved in our request. The mission, however, is highly classified, and I would not like to put into the record the names of all the bases. However, they are before you in the books which you have.

I have gone through all of the requests, and have picked out one each of every different type item we are requesting, and I would like to read that.

The list includes the following:

Chapels, bowling centers, enlisted men's service club, officers' open mess, hobby shop, utility shop, addition to gymnasium, streets and walks, base post exchange cafeteria.

The total cost of all of the items, of which this list is representative, for the Armed Forces special weapons projects, is $3,014,000.

Mr. Chairman, that is shown on page 447 of this book.

SANDIA BASE, N. MEX.

In addition to that, we are requesting family housing at one of these installations, and that is the Sandia Base, in the amount of $1,231,000.

In addition to that information, I have witnesses here who can talk off the record to any questions you have, sir, on the mission, or anything else connected with this project.

Mr. FORD. Off the record.

(Discussion off the record.)

Mr. RILEY. Off the record.

(Discussion off the record.)

Mr. RILEY. What is your community support at Sandia? Is it too far removed to take care of your critical requirements?

Colonel DAVIS. No, sir.

Colonel SHULER. I can answer that question, Colonel Davis, and that will allow me to get the family housing statistics into the record for the one request, which is 90 family quarters, at Sandia Base, N. Mex.

The total requirement is for 1,428 units, and the assets are 619, of which 300 are Wherry, which leaves a deficit of 809.

This is a suburban station, located at Albuquerque, N. Mex., which has a population of 160,000. No other cities are within reasonable commuting distance.

We have been using 300 sets of family quarters from the community support at Albuquarque.

Mr. RILEY. Does service at this base involve any hardship?

Colonel SHULER. Do you mean serving on this station, sir?

Mr. RILEY. I mean from the standpoint of commuting.

Colonel SHULER. I do not believe it would involve any hardship, sir, except that we feel the people for whom we are asking these quarters, and you will notice that 78 of these sets of quarters are for noncommissioned officers, do not receive enough rental allowance with which to rent decent quarters in the community.

Colonel DAVIS. I might mention here, Mr. Chairman, that Albuquerque is a unique case. It has either very good houses or very poor houses. The poorer element is the part which the noncommissioned officers have to use. The poor population, of course, is mostly Mexican, and the houses which have been developed for them are what the Mexicans want, but they are not very satisfactory for the Army noncommissioned officers.

Mr. RILEY. In other words, they did not have too many facilities at an average cost?

Colonel DAVIS. That is correct, sir.

At the higher cost projects, there are practically no houses for rent. The military personnel who occupy civilian houses are having to buy.

Mr. RILEY. I see.

Mr. MILLER. Off the record.

(Discussion off the record.)

Mr. RILEY. The people who are stationed at these classified stations do not have so much freedom in going and coming as they do at the average station; is that correct?

Colonel SHULER. That is correct.

Colonel DAVIS. I can add a little bit to that, Mr. Chairman: Almost half of these people at each of these bases are on shift duty. We operate 24 hours a day. So, their capability for getting away is limited by the fact that they are running on a 24-hour operation.

Mr. MILLER. They are really in effect standing watch like a crew on a ship at sea; are they not?

Colonel DAVIS. Yes, sir.

Mr. MILLER. Someone is on duty all the time, and the others are in course of rotation?

Colonel DAVIS. Yes, sir; in addition to being on shift duty, and even though they can get away, they are not necessarily able to get away when civilian facilities are available to them.

Mr. MILLER. That is because of the hours of their particular shift?

Colonel DAVIS. Yes, sir; because of the hours which they work. So, we have programed here these items to meet that need.

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CHAPEL

Colonel DAVIS. Now, we have a chapel listed for each of these places. The only building we now have that is large enough to accommodate more than a few people is what we call a lecture assembly building. That is used for a school, indoor training, and for a theater, and currently it is also being used as a chapel, but under a very unsatisfactory situation.

Mr. RILEY. I can well appreciate your need for the facilities you have requested at these bases. Not only is it very confining work, but I am under the impression that it is desirable and that they do not receive as many passes as the average enlisted men, and for that reason they are more closely confined?

Colonel DAVIS. Yes, sir.

Mr. RILEY. It gets very monotonous there, unless they have some facilities.

Mr. MILLER. It would seem to me, Mr. Chairman, if I might make a suggestion, and I do not want to take the time to do it now, but it would seem to me that if the Colonel or someone would prepare a generalized statement, without saying anything which would pinpoint any of these installations, but pointing out the fact that they are in a relatively remote place, and are inaccessible, plus the fact that they have to stand ready for 24-hour availability watch, and so forth, and because of the overall situation, they have a particular need for this sort of thing. That would not injure security in any way; would it?

Colonel SCHULER. No, sir; we shall be glad to furnish that information for the record.

Mr. MILLER. You probably have such a statement prepared anyway, but in the event you do not, it will only take a short time to prepare one, and put it into the record at this point.

It would save a whole lot of detail.

Mr. RILEY. I think so, too.

Mr. MILLER. However, we do not want to pinpoint it.

Mr. RILEY. I think we should have the number of stations covered under this category, however.

Colonel SCHULER. All right, sir.

(The information requested follows:)

GENERAL STATEMENT OF JUSTIFICATION FOR AFSWP FISCAL YEAR 1956 PROGRAM, JUNE 30, 1955

The projects included in the AFSWP fiscal year 1956 MCA program, are proposed for construction at seven different installations scattered throughout the continental United States. In the main, these bases are in locations somewhat remote from civilian community centers. Many of the operations conducted at these bases must be carried out on an around-the-clock schedule, 7 days each week, so that even where off-base religious and recreational facilities are available in nearby communities, they are often closed at times when off-duty personnel would desire to use them.

The AFSWP construction program for 1956 includes 7 chapels, 4 enlisted men's service clubs, and an addition to 1 enlisted men's service club, 2 hobby shops, 6 bowling centers, an officers' open mess, a base exchange cafeteria, an addition to a gymnasium, a repairs and utilities shop, and the rehabilitation of streets and walks at 1 installation.

The majority of this construction is to provide adequate facilities for the conduct of religious services and for recreational purposes. The facilities requested are modest and are necessary for the welfare, health, morale, and efficient performance of the tasks assigned to personnel stationed on the various

bases. The officers and enlisted men assigned to these facilities engage in hazardous and, in the case of guards and security forces, extremely monotonous and lonely duty. Continuous operations under such conditions require religious and recreational outlets if the efficiency and morale of the organization are to remain high.

At 6 of the 7 bases, religious services are now conducted in lecture-assembly buildings which, in addition to being used for lectures and indoor training, are used as theaters. These buildings lack the dignity and attributes of acceptable chapels, and the chaplain's office must be provided elsewhere, often in a barracks room which restricts the privacy of his interviews and is highly unsatisfactory.

The bowling centers we are requesting are planned to be added to the gymnasiums which are now under construction. Only the building will be provided from MCA funds and a substantial saving is to be effected by constructing these centers as additions to the gymnasium buildings. The alleys proper will be provided and operated by the post exchange service.

The enlisted service clubs proposed will provide the only facilities at the various stations (except for small post exchange snack bars) where enlisted men and noncommissioned officers can congregate socially.

The base exchange cafeteria is proposed for construction at our largest installation where there are no adequate facilities for feeding large numbers of officers, enlisted men, and civilian employees who do not live on the base.

The two hobby shops that are proposed are the same as the ones which have already been constructed at the other stations.

The officers' open mess is a replacement for a condemned temporary building which was moved, reerected and modified by the officers themselves. The present building is structurally unsafe and a fire hazard.

The gymnasium addition proposed is also to be constructed at our largest base where the present gymnasium is too small for the population which it serves. This addition will enlarge the building only to the space authorized by applicable regulations.

The repairs and utilities shop which is to be constructed at one base is intended to provide adequate shops at that station similar to the shops provided at other installations.

The project for rehabilitation of streets and walks is necessary to alleviate serious traffic conditions which have arisen at one of our largest installations.

All of this work is consistent with standards established for other permanent military installations by applicable regulations.

Mr. RILEY. Colonel, is there anything additional which you care to say in connection with these projects?

Colonel SHULER. No, sir.

Mr. RILEY. Colonel Shuler, will you advise the committee of the next base which you wish to justify in construction work?

Colonel SHULER. Yes, sir, Mr. Chairman. The next item occurs on page 73 of the family housing book, and it concerns family housing for our Nike installations and, with your permission, I would like to defer the discussion of them until we come to the entire Nike program toward the end of the presentation.

Mr. RILEY. I believe that would be better.

REHABILITATION OF EXISTING FAMILY QUARTERS, UNITED STATES

Colonel SHULER. I will go directly now to the next item which is on page 75 of the family housing book, which is the rehabilitation of existing family quarters in various locations throughout the United States, $2,661,000.

This particular item, Mr. Chairman, is for the same sort of work as the work that we have been doing under the Department of Defense Family Housing Act for the fiscal year 1955, Public Law 765, 83d Congress, 2d session, which gave us authority and authorized funds for constructing new housing and to rehabilitate existing family housing. We are only doing this on permanent installations, and only doing it to permanent sets of family quarters.

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We have set down rules that will keep our average cost of all units within any command zone to not to exceed $2,100. We do not allow them to exceed $10,000 on any one house. So, in order to achieve a $2,100 average, you see there would have to be a great number of projects which are below $2,100.

We are merely rehabilitating these quarters and modernizing the kitchens and bathrooms.

We are also modifying some large sets of quarters in order to provide two sets of family housing quarters instead of the one set which exists. We are providing new wall finishes and replacing outmoded floors and that type of work, sir.

Now, we received about $12,250,000 to do that sort of work under the fiscal year 1955 program, and we have practically all of that money obligated right now, sir.

This request that we have before the committee today, is in the amount of $2,661,000, and the locations for this work are listed on the 68–C and on page 76 in the family housing book.

Mr. RILEY. Please insert the amounts and locations in the record.

Colonel SHULER. Yes, sir.

(The information requested is as follows:)

DEPARTMENT OF THE ARMY

Family housing program for fiscal year 1956—proposed rehabilitation

Army area and station	Number of units	Estimated cost
First Army: Fort Monmouth	30	$200,000
Total	30	200,000
Second Army:		
Letterkenny Ordnance Depot	6	9,273
Columbus General Depot	17	8,000
Erie Ordnance Depot	8	6,768
Fort Meade	71	108,411
Fort Monroe	23	171,548
Total	125	304,000
Third Army:		
Atlanta General Depot	10	60,000
Fort McPherson	22	107,750
Fort Bragg	140	80,000
Fort Benning	161	197,250
Total	333	445,000
Fourth Army:		
White Sands Proving Ground	74	20,983
Fort Sam Houston	103	107,450
Fort Sill	48	88,742
Total	225	217,175
Fifth Army:		
Fort Riley	143	346,598
Fort Leavenworth	157	398,877
Total	300	745,475
Sixth Army:		
Presidio of San Francisco	26	60,000
Utah General Depot	2	19,000
Sacramento Signal Depot	7	35,800
Fort Huachuca	56	212,900
Umatilla Ordnance Depot	22	63,900
Total	113	391,600
U. S. Military Academy	225	357,750
Total	225	357,750
Grand total	1,351	2,661,000

Mr. RILEY. Off the record.

(Discussion off the record.)

Colonel SHULER. We feel, sir, that this is extremely remunerative work because this will involve the expenditure of a lot less money than we would have to spend to build new sets of quarters. We need quarters that come up to the proper standards, and we desire to eliminate a lot of deficiencies in these older permanent quarters and to continue these quarters for an indefinite period of time.

Mr. RILEY. After you rehabilitate them the operation and maintenance will be considerably reduced; will it not?

Colonel SHULER. Yes, sir, that is correct. For example, if we take out all of the outmoded plumbing and put in more modern plumbing that reduces our maintenance cost by a great amount, sir.

Mr. RILEY. Will you rehabilitate the heating system in any of them?

Colonel SHULER. Yes, sir; we not only rehabilitate the heating, but in some of the projects we have taken out the old outmoded heating system. I believe at Fort Belvoir, and the engineers can verify this, we have replaced a number of the old heating plants with more modern heating plants.

Colonel MALEVICH. We have changed a number of them from coal to oil.

Mr. RILEY. That saves money in janitor service, too; does it not?

Colonel SHULER. Yes, sir, that is right.

Mr. RILEY. Off the record.

(Discussion off the record.)

BIG DELTA, ALASKA

Colonel SHULER. Now, the first station overseas in the overseas book on page 481, and for which family quarters are shown on page 77 in the family housing book, is Big Delta, Alaska.

FAMILY HOUSING

The items for Big Delta, Alaska, start with the family quarters. We are asking $2,368,000 for 72 sets of family quarters which are officer and noncommissioned officer type quarters.

The rest of the items at Big Delta are a noncommissioned open mess, 6,500 square feet; laundry and dry-cleaning plant, 11,415 square feet; hobby shop, 1,960 square feet; and civilian bachelor quarters for women, 39 rooms.

I might insert the mission of Big Delta in the record. This is the Army Arctic Center, including the Arctic Indoctrination School which has to do with survival, tactical, and logistical operations in very cold weather, and the Arctic Test Branch, where we perform research and development functions.

NONCOMMISSIONED OFFICERS' OPEN MESS

This project in amount of $241,000 is required to provide club facilities, based on 245 top 3 grades of noncommissioned officers, plus 100 transient students attending the Arctic Indoctrination School. Complete absence of recreational facilities in this area creates an ur-

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gent need for adequate noncommissioned officers' open mess facilities. The present noncommissioned officers' open mess facilities consist of two 16-by 36-foot quonsets and a 12- by 12-foot frame storeroom located 1¾ miles from new post facilities. The nearest comparable offpost civilian facilities are located in Fairbanks, 105 miles distant. The existing facility is not to be retained.

LAUNDRY AND DRY-CLEANING PLANT

The proposed laundry and dry-cleaning plant, $589,000, is urgently needed as the existing World War II wood frame plant, 20 by 120 with 20 by 48 foot addition, does not meet the station need and is a fire hazard. The laundry facilities serve the Signal Corps military personnel stationed in outlying areas as well as post population. Approximately 3,376 pieces a week are processed through the laundry and 466 pieces a week dry cleaned. The nearest commercial laundry is in Fairbanks, 105 miles distant. The existing facility will not be retained.

HOBBY SHOP—$54,000

There are no YMCA, USO or similar recreation representatives on this post. Due to subarctic weather (average winter temperature of 1 degree and minimum readings to 63 degrees, 11 miles per hour average wind velocity and 80 miles per hour May winds), on-post recreational facilities are urgently needed for enlisted men. There are no comparable off-post facilities available nearer than Fairbanks, 105 miles distant.

CIVILIAN BACHELOR QUARTERS (FEMALE)

Due to a lack of off-post housing, this project, $386,000 is required to provide quarters for 26 bachelor female civilian employees and 9 school teachers. Three rooms are required for commissioned female officers, and the remaining room will be used to billet transient female personnel requiring quarters. The need is now being met by using 13 rooms in temporary-type quarters which will not be retained.

This particular station is 105 miles southeast of Fairbanks, Alaska.

Mr. RILEY. It is in a more or less isolated sector, then?

Colonel SHULER. That is correct, Mr. Chairman.

Mr. RILEY. Mr. Ford, do you have any questions?

Mr. FORD. I have no questions, Mr. Chairman.

EIELSON AIR FORCE BASE, ALASKA

Colonel SHULER. The next station, sir, is on page 486, Eielson Air Force Base. We are asking appropriations for Army facilities at the Air Force base in order to allow us to better carry out our mission in the manning of the ground and antiaircraft defense of Eielson Air Force Base.

I might point out, Mr. Chairman, that among the Army missions in Alaska is that of the ground protection of vital Air Force bases located in Alaska.

The item which we are asking for at Eielson Air Force Base is a maintenance shop with heated vehicle storage, $1,047,000, in order to

allow us to utilize our vehicles in the very, very cold weather that exists at this base.

MAINTENANCE SHOP WITH HEATED VEHICLE STORAGE

Due to the intense cold (40° to 60° below zero), proper maintenance facilities are essential to keep 48 vehicles, tanks, prime movers, weapon carriers, and so forth assigned to the 6 separate Army organizations at this installation available at all times for carrying troops, guns, and equipment to the field.

The proposed facility, together with a similar existing one, will provide 50 percent of the total requirement.

Presently 2 antiaircraft artillery battalions are utilizing two 3,108 square foot SP–2 shops which are capable of handling lighter vehicles but not prime movers. Field artillery and tank companies are using 1-vehicle capacity quonsets which constitute a fire and health hazard and will be dismantled and returned to the Air Force upon completion of the proposed facility. The proposed shop will increase operational efficiency by permitting either 1 or 2 vehicles being worked on at 1 time; reduce the necessity for warmup period before vehicles undergo maintenance; and result in an increased number of vehicles being kept operational for emergency use.

Mr. RILEY. Off the record.

(Discussion off the record.)

LADD AIR FORCE BASE, ALASKA

Colonel SHULER. The next station, sir, is on page 488, Ladd Air Force Base.

Here we have a similar mission as at Eielson; that is ground and antiaircraft defense of the Air Force base, and also we have a logistical mission for the support of Army units in northern Alaska.

The two items requested at this base are a gas station and a storehouse for flammables, and in addition we would like to have an open storage area for some of the flammable materials.

GAS STATION

This proposed facility, $36,000, will be located adjacent to and complement the new south organizational maintenance shop being erected on the east side of street 1, between streets 4 and 7, and will replace a temporary station located in an area which must be vacated upon completion of the new maintenance shop. The proposed station, together with two 2-nozzle existing permanent stations, will provide approximately 60 percent of total permanent requirement (based on regulations and design criteria of 50 vehicles/nozzle) for five 2-nozzle stations to serve 558 vehicles. When the existing temporary station is vacated, the wood frame attendant's building will be moved and probably used as a dispatch house. Deletion of this project and necessity to vacate present temporary station will result in an abnormal load of approximately 140 vehicles per remaining nozzle.

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STOREHOUSE FOR FLAMMABLES WITH OPEN STORAGE AREA

Due to the extremely cold weather common to this area, this project $248,000, is required to provide heated fireproof facility for storage of paints, lubricants, and similar flammable items which are presently stored in tents and small wood-frame buildings which present a serious fire hazard. In addition, lack of heat in a majority of the buildings now used results in lubricants and paints often freezing during winter months, thereby rendering certain types useless and also causing difficulties and delays in maintenance operations. Items to be stored are required in the servicing of vehicles and painting of structures, vehicles, and equipment. Ten thousand square yards of open hardstand area is required for outside storage of certain lubricants not affected by temperature.

FORT RICHARDSON, ALASKA

The next station, sir, is Fort Richardson, Alaska, on page 491.

The mission of this particular station, which is 7 miles northeast of Anchorage, Alaska, is logistical support for all Army operations in Alaska, including special requirements for supply and maintenance facilities and training facilities for both Alaskan civilian component and continental active Army units receiving their tactical training in Alaska. In addition it is the antiaircraft and ground defense for Elmendorf Air Force Base.

We are asking at this station that we be given the money to fund the following:

Three water wells for the standby domestic supply; modification to the central heat and powerplant; noncommissioned officers' open mess; three enlisted men's barracks with mess; an addition to the AGD warehouse; completion of roads, streets, walks, grading and topsoiling; a community center building; railroad spurs and three loading docks; hangar and aviation facilities and POL terminal storage.

THREE WATER WELLS (STANDBY DOMESTIC SUPPLY), $452,000

Annually, during February and March, the flow of water in Ship Creek is inadequate to meet full demand, resulting in low flow rates and requiring reduction in use. Fort Richardson and Elmendorf Air Force Base have a written agreement with the city of Anchorage to share available flow equally according to population. As the city grows and the military bases increase the number of permanent on-post barracks and quarters, water demand rises. The new 2,500,000-gallon reservoir under construction will require standby well sources of water if it is to be effective during low-water stages or during emergencies, such as waterline breaks or fire demands. Water mains are subject to rupture annually both from freezing (even at 9-foot burial) and by seismic action as indicated by 2 major breaks on this post and 1 at Elmendorf during last tremor. Although city of Anchorage has no existing wells, it has a deep test well under contract for drilling in 1955, the initial well of an expansion program to augment their water supply now obtained from the Ship Creek watershed.

MODIFICATIONS TO CENTRAL HEAT AND POWERPLANT, $641,000

Improvements represent requirements based on actual operation of the plant and, generally, have been incorporated in the design of later similar facilities in Alaska. Items 1, 2, 3, 7, and 8 are safety measures required to reduce hazards to operating personnel. Item 8 is also a security requirement. Item 4 will provide a standby coal elevator to permit continuation of operation in case of breakdown of present coal elevator, both a security and a tactical requirement. Item 5 will provide standby steam-driven turbines for use in case of electrical failure. Item 6 comprises two 3-ton hoists to be installed to serve the operating, coal scale, and fan floor areas. Proposed project is urgently needed to eliminate deficiencies of the existing plant.

NONCOMMISSIONED OFFICERS' OPEN MESS

This project, $506,000, is required to provide a facility in keeping with standards for recognition of the status of noncommissioned officers as leaders and vital links in the chain of command and is based on serving 2,200 top 3 grade NCO's. This number of top 3 grade NCO's is due, to a large extent, to the fact that Headquarters, U. S. Army, Alaska, is also housed at Fort Richardson. Present 6,500 square foot facility consists of modified quonsets and frame structures, with little or no salvage value, which were jointed to provide an interim facility. Present storage room is an old railroad boxcar. Upon completion of proposed project, existing structures will be demolished or, where practical, retained to meet interim winter training requirements.

THREE ENLISTED MEN'S BARRACKS, WITH MESS, $2,119,000

This project requirement is based on the following:

Permanent enlisted men strength		8,029
Married and entitled to family quarters		[1] 1,766
Total barracks spaces required		6,263
Existing barrack spaces:		
14 200-man	2,800	
4 500-man	2,000	
Less existing barrack space		4,800
Additional barrack spaces required		1,463

[1] 1,161 NCO family quarters available.

This project is urgently needed for, in spite of the existing permanent barracks being occupied at reduced space allowances, 3,411 troops are presently housed in 400 quonsets in dispersed areas. These quonsets are 10 to 14 years old and, upon completion of proposed project, those vacated will be salvaged if beyond economical rehabilitation or used to replace poorer-type structures now serving as storehouses or personnel shelters during winter operations.

ADDITION TO AGD WAREHOUSE (BUILDING NO. 800), $523,000

This project is urgently needed to provide a portion of the 439,342 square feet deficiency of covered heated warehousing for Alaska General Depot to support a theater military strength of 15,000 to 30,000,

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including Army, Air Force, Navy, District Engineers, Alaska Railroad, Alaska National Guard, and Alaska Communication System. Depot requirements vary from ZI standards—depot levels run up to 180 days for select items; additional requirements, such as winterization kits and heated space for all operating functions, are generated by climatic conditions; and, due to inadequate local procurement, many items not normally found at depots must be stocked. Two 60 by 150 feet SH–12 warehouses, now utilized to supplement existing warehouses, will be retained until expiration of their effective service life.

ROADS, STREETS, AND WALKS, $750,000

This item represents a portion of the requirements for roads, streets, and parking, with lead-in sidewalks, grading, topsoiling, and seeding adjacent to the proposed paving, to serve existing facilities or those presently under contract which did not include these requirements in the original line items. A total of 31 buildings and 2 large service areas need to be provided with permanent access roads, hardstand, lighting, etc., as follows: 7 CBQ's; 5 BOQ's; AGD Headquarters, No. 977; laundry and dry-cleaning plant, No. 726; fieldhouse, No. 690; post engineer, No. 700; AGD ordnance shop, No. 796; post ordnance shop, No. 798; freight-handling equipment shop, No. 812; AGD quartermaster shops, No. 976; AGD engineer shops, No. 974; combined shops, Nos. 978 and 980; POL laboratory, No. 986; organization maintenance shops, Nos. 740–750, 756, 778, and 784; post bakery, No. 730; post guardhouse, No. 799; theater, LCL warehouse, post engineer area, and post motor park. Funds to provide the balance of these requirements will be requested in a subsequent program, and all future line items will include the cost of related roads and ground development.

COMMUNITY CENTER BUILDING— 1,411,000

This project is required to provide: A commissary with capacity for approximately $197,600 a month sales to serve 2,470 families; a post office with sufficient space to handle and process mail, including second and third class delivered at irregular intervals by boat and carload lots; a PX cafeteria to serve both military and civilian personnel; and a bank. Present facilities consist of a 12,000 square foot frame warehouse (commissary) which, due to lack of space, requires customers to wait 2 to 3 hours for service; 6,500 square feet in a 200-man barracks (post office; storage and laundry areas of basement in a civilian bachelor quarters (cafeteria); and a quonset hut (bank). Presently occupied space will revert to original use, except the quonset which will be removed or salvaged. Proposed facility will adjoin fiscal year 1955 authorized 16,900 square foot main exchange.

RAILROAD SPURS AND THREE LOADING DOCKS—$140,000

Three railroad spurs with docks are required to increase Army rail switching rate average (19 to 15 cars per engineer-hour) in order to handle trains of as many as 80 cars (50-car average) received in classification yards from Alaska Railroad. Proposed facilities will result in saving approximately $24,000 a year ($10 per transporta-

tion unit) in handling an average of 386 commercial units per month (19 units per working day) unloaded in Alaska General Depot. In addition, need for using low-bed trailers for track equipment and shuttle trucks to transport items from ramp to open storage areas will be reduced to practically nil. Existing 20- by 70-foot wood dock with end ramp (built in 1941) will be retained until maintenance becomes excessive.

HANGAR AND AVIATION FACILITIES—$354,000

This project is required to provide maintenance, operational, and control facilities for 9 permanently based planes (5 L–19, 2 L–20, L–33, and H–13 and space for field maintenance of 25 additional Army planes (7 L–19, 4 L–20, 4 H–13, and an L–33 attached to the 71st Division and 6 L–19 and 3 L–20 operated by Alaska National Guard). Permanently based planes are required to fly a minimum of 270 hours a month, making heated facilities essential for normal operation. Present facilities, include quonset and Jamesway huts, with oil-fired space heaters, and an unheated nose hangar built by troops from salvaged material. These facilities are without water or sanitary provisions and constitute a fire hazard. The Air Force had requested that hangar space at Elmendorf AFB, occupied by Transportation Aviation Maintenance Detachment under use agreement expiring June 1, 1956, be released by that date. However, compliance is impossible until proposed facility is constructed as suitable space is not available, even at city of Anchorage's Merrill Field. Proposed hangar will be similar to that at Ladd AFB.

POL TERMINAL STORAGE—$2,183,000

This project is required to provide storage for tanker deliveries during the summer months and thereby permit the saving of $350 a tank car in railroad freight from Whittier. At an average of 990 tank cars per winter season, a saving of $346,500 is possible, requiring an amortization period of 10 years. Both the Anchorage and the Whittier tank farms are required to store POL for units located south of the Alaska Range.

COST FACTOR

Mr. RILEY. What is your cost factor now up there in that area?

Colonel SHULER. It is about 2.2, sir. May I correct that, sir? The Alaskan index is about 2.2, but Mr. Foster informs me that it is about 1.6 at Fort Richardson.

Mr. FOSTER. May I say on the record, Mr. Chairman, that the cost indexes should only be applied to large groups of projects because they do not apply to individual construction items. On a very complex item you will have a high index, while on a simple item you will have a very low index at the same location.

COST OF ENLISTED MEN'S BARRACKS

Mr. RILEY. About what do your barracks' costs run there?

Colonel SHULER. The total cost of the 3 enlisted men's barracks in this request is $2,119,000, and the unit cost is $3,075 per man. This cost is comparable with $1,700 per man in the United States.

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POL TERMINAL STORAGE

Mr. Chairman, I would like to put in the record some additional information on the request for POL terminal storage, the last item which I read on the list.

Mr. RILEY. Yes.

Colonel SHULER. I would like to pass this little sketch around to the committee members.

Mr. RILEY. Is that underground storage?

Colonel SHULER. Yes, sir. I will pass this sketch to the committee members so that you can follow this short statement.

The POL terminal storage at Fort Richardson, which is 200,000 barrels and in the amount of $2,183,000 which we are requesting, is for the support of the Army and the Air Force.

The products are shipped to the port of Anchorage by ocean tanker during the summer months. During the winter months the products are shipped to the port of Whittier by ocean tanker and then transported to Fort Richardson by rail-tank car.

To resupply the POL products at Fort Richardson during winter months or periods of emergency, other than through the port of Whittier would require rail haul from Ladd-Eielson or truck haul from Tok Junction on the Alaskan pipeline. The costs of truck and rail haul are excessive and these methods are uncertain due to hazardous weather conditions. Truck haul from Tok Junction, for instance, is about 350 miles. In addition, on this particular item this project would provide storage for tanker deliveries during the summer months and thereby permit savings of $350 per tank car in railroad freight from Whittier. At an average of 990 tank cars per winter season, a saving of $346,500 is possible. This would allow amortization projected for a period of 10 years. Both Anchorage and Whittier tank farms are required to store POL for units located south of the Alaska Range.

Mr. RILEY. I notice you have a pipeline there from Fairbanks down to Haines; is that right?

Colonel SHULER. Yes, sir.

Mr. RILEY. The only source of supply is from the tank cars on the railroad, or do you have another supply?

Colonel SHULER. The tank cars on the railroad which would come from Whittier over to Fort Richardson, or we would have to haul it from some of these areas over to here [indicating].

Mr. RILEY. Where is the source of supply for these pipelines?

Colonel SHULER. I meant to put that in the record. The Alaskan pipeline extends from Haines, near the head of the inland passage in Alaska to Ladd Air Force Base, adjacent to Fairbanks in the interior of Alaska.

The pipeline is approximately 600 miles in length, of which 284 miles are located in Canada. It consists of an 8-inch multiproducts pipe designed to 1,500 pounds per square inch, with 5 pumping stations and has a capacity of 16,000 barrels per day. These pumping stations are located at Haines, Tok Junction, Eielson, and Ladd.

The base rights agreement provides for a 3-inch takeoff at the Haines cutoff junction at this point [indicating] with the Alcan Highway to serve the Whitehorse area in Canada.

The estimated cost of this pipeline is $40 million. It is about 80 percent complete.

It does not serve in this area, except as we could haul by truck over very tough terrain, and under very adverse weather conditions.

We would like to get at Fort Richardson enough storage so that in wintertime or during an attack on Alaska, if that should ever happen, we would have enough POL products to meet the needs of the Air Force and the Army.

Mr. RILEY. Where do you get your fuel into the pipeline originally?

Mr. FOSTER. That is done at the port of Haines where there is a petroleum tank-car dock and pumping station, and there are two main interim pumping stations between Haines and Fairbanks.

Mr. RILEY. Is the port of Haines open all the year around?

Mr. FOSTER. Yes, sir. I have just been informed by Colonel Malevich that they expect to put oil into the line late this month or the early part of next month.

Mr. FORD. Is this pipeline of sufficient capacity to handle the needs, I guess it is to the west, of the area where you now want to put the terminal storage?

Colonel SHULER. It was not designed for that. It was designed to supply the Ladd Air Force Base, the Eielson Air Force Base, Big Delta and the various storages along the pipeline, and not to provide products for the Elmendorf Air Force Base and the Fort Richardson area where we need this added storage. We ship most of this in by ship into these two ports.

Mr. FORD. Would it be economically feasible to run an extension to those areas from the present pipeline?

Colonel SHULER. No; we do not feel that it would be, sir, because it would mean increasing the capacity of the pipeline, and I do not believe that it would be feasible to do that from a cost standpoint, sir, because of the distance involved and because of the cost of the pipeline. Once we get this storage into the ground we would ship in tankers, take the products off, and put them in the tanks, and we would have them right there when needed.

Mr. FORD. Is not that area in an open area where in case of conflict it would be susceptible to attack?

Colonel SHULER. Which area; the pipeline area?

Mr. FORD. No; the other area.

Colonel SHULER. These would be underground tanks. However, it would be pretty easy to cut the pipeline, too, for that matter.

Mr. FORD. I am thinking about the ports of entry here. Are not those in the open areas, and along the inland route?

Mr. FOSTER. That is correct. That is one of the reasons why the Haines-Fairbanks pipeline was installed in the first instance so that the tankers could use the inland passage. Haines is at the northern end of it. However, unless there is some submarine or enemy air attack the territory south of the range can be supplied much more economically by tanker through the southern ports of Whittier and, during the summer months, Anchorage. In case of an emergency, if submarines infested that part of the Alaskan gulf then the stations south of the range would have to depend on the pipeline and shipments from Fairbanks.

Colonel SHULER. That is, to a greater degree. I cannot conceive of all shipments being cut off by submarines.

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Mr. FORD. Seward and Whittier are far more exposed to that kind of attack than Haines?

Colonel SHULER. That is correct.

WHITTIER, ALASKA

The next station is Whittier, Alaska, on page 502, where we are requesting three items. This base is located 62 miles southeast of Anchorage. We are requesting funds for the following, post engineer office, shops and storehouse, $369,000; laundry and dry-cleaning plant, $550,000; and swimming pool, $264,000, which is an addition to the gymnasium; a total of $1,183,000.

POST ENGINEER OFFICE, SHOPS AND STOREHOUSE

The proposed structure is necessary to provide facilities required by the post engineer for the administration and operation of his organization which is responsible for maintenance and repair of all buildings and post facilities and the operation of all utility plants and systems. Shops required for performance of operations which cannot be performed on the job, major repairs and fabrication. Storage space and property office required for economical administration, handling and safeguarding of R. and U. materials and supplies. Activities now occupy 11 dispersal T/O-type structures which are uneconomical to maintain and, due to their interference with programed construction, are scheduled for removal. Port of Whittier has abnormally heavy snowfall (30 inches per 24 hours in January 1954; 204 inches maximum monthly; 240 inches mean annual total) and, in addition, over 100 inches per year is blown into the port area by high winds from surrounding mountains and glacier masses. Snow accumulation on level areas is over 12 feet deep and drifts are over 20 feet deep.

LAUNDRY AND DRY-CLEANING PLANT

This project is required to provide an efficient and dependable facility to serve 2,400 military and civilian personnel at this isolated installation. Present laundry facilities are in such poor condition that regular production is impossible, a 2-week backlog is not unusual. Physical condition of the building boilers and equipment is such that continued repair and costly maintenance are unwarranted. There are no commercial laundries available within reasonable distance. Upon completion of proposed facility, existing laundry will be removed as it interferes with programed construction.

SWIMMING POOL

This proposed facility is required for athletic, recreational and training activities for 1,093 military personnel, 182 civilian and 302 dependent families. The hazardous nature of stevedoring and harborcraft operations with continual exposure to danger of submersion makes training in swimming an urgent necessity for all port units. Year-round water temperature of 39 prevents ocean swimming. Access to Whittier is by one railroad train per day only, therefore, recreational activities are limited to those provided on post. An

average yearly rainfall of 180 inches and an average snowfall of 240 inches with 120 inches of blown snow greatly restricts outdoor recreational activities.

Mr. RILEY. That would be an inside swimming pool, would it?

Colonel SHULER. Yes, sir.

Mr. FORD. Off the record.

(Discussion off the record.)

USE OF PORT

Mr. FORD. Is Whittier now used exclusively as a military port?

Colonel SHULER. I cannot answer that, Mr. Ford, but I can get the answer for you. I would say in time of war that it probably would be, sir.

Mr. FOSTER. Mr. Ford, there is one privately owned petroleum dock, and, if my memory serves me, a privately owned lumber mill at Whittier.

It must be remembered that the only access that Whittier has to the interior is by the Alaska Railroad, going through two tunnels. There is no road access to the port, so the private use is small in comparison to the military use.

Mr. FORD. Apparently, according to the testimony, it did involve some problem between the Army and the Department of the Interior.

Mr. FOSTER. That was the basic difference of opinion, Mr. Ford, but that was settled about 2 years ago.

Mr. RILEY. Do you remember what the settlement was?

Mr. FOSTER. The Army obtained jurisdiction of the area that it needed, Mr. Riley.

Mr. FORD. According to this testimony the Army was only using a portion of the facilities at Whittier and there were unoccupied facilities which would be adequate for use on a reimbursable or lease basis to civilian operators while unloading cargo at that port. I gathered that these commercial operators wanted to use such unusued facilities during peacetime. Do you know whether or not those facilities are now usable by commercial operators?

Colonel SHULER. I do not know, but I will find out, sir. I will say that the Army's policy is, if possible, to lease out anything it does not need where it does not interfere with its military mission, but I will have to find out about this particular one.

Mr. RILEY. Will you yield, Mr. Ford?

Mr. FORD. Yes, sir.

Mr. RILEY. Were not the docks there destroyed by fire?

Colonel SHULER. Yes, sir.

Mr. RILEY. Are the present docks as fully adequate as the ones which were destroyed by fire?

Mr. FOSTER. They are better arranged physically, Mr. Chairman, but so far as their capacity is concerned they were designed only to handle the military cargo load.

I was at the port of Whittier about a year ago, or a little less, and at that time they were using the temporary De Long pier of about 600 feet in length. I think the controversy that Mr. Ford refers to obtained when we had the dock which burned down.

Mr. RILEY. Evidently that is the case. A quick reading of the testimony there indicates that the capacity of the present facilities

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is not as great as that of the docks that were destroyed. Therefore, the people who operate commercially have no opportunity to lease the necessary docks and warehouses that go with a commercial enterprise. I wonder if there are any plans to build additional docks for lease to commercial people to replace the ones that were destroyed by fire. What is the obligation of the Army in regard to these people?

Colonel SHULER. I cannot, Mr. Chairman, furnish that information. I can get it right away from responsible people in the Army, and I would like to do that because I cannot specifically answer your last question, but I know that we have no plans to replace the burned docks other than the portion which is necessary for Army requirements.

Mr. RILEY. Off the record.

(Discussion off the record.)

(The information referred to follows:)

The Army has no obligation to build or lease docks at Whittier, Alaska, for use by private enterprise. Long-range plans for the use of this port preclude the use of any Army facility located there by private enterprise because of limited level land space in the vicinity and the almost complete lack of housing for personnel who would be required to operate such activity.

Mr. FOSTER. I have in front of me a map of the area at Whittier, and it confirms what I said a little earlier.

There is a lease along the waterfront of the Columbia Lumber Co., and there is a privately owned pier of the Union Oil Co. The new dock which is being built with Army funds was sized only to handle military cargo. I think the committee will understand that in asking for $6 million to replace the dock which was destroyed by fire, the Army was in no position to ask for money to build dock capacity surplus to its own needs.

Mr. FORD. I do not believe this committee ever received a complete report on the fire loss at Fort Whittier, not that we technically require it, but I do not recall that it was ever received.

Colonel SHULER. It was presented to all four committees in connection with the requests for emergency type construction. That is, the two Appropriation Committees and the Armed Services Committees. I do not know whether that particular data came into it.

Mr. FOSTER. It did, sir. I was present 2 years ago at the meeting of the Civil Functions and Military Construction Subcommittee, of which Mr. Riley was a member, and that fire damage was given there in the record. That should be a matter of record.

Mr. FORD. It might be well to just duplicate it here.

Mr. RILEY. I think Mr. Ford's suggestion that an answer be prepared and inserted in the record in regard to this question would be appropriate. It should be in line with the testimony presented last year after the fire. Do you have any other suggestion on that?

Mr. FORD. No.

(The matter referred to is as follows:)

Facilities completely destroyed by fire at the port of Whittier, Alaska on June 17, 1953.

(*a*) Timber pier, 150 feet wide and 2,200 feet long, providing 3 full ship berths to accommodate Liberty and Victory ships, and 1 shallow draft berth.

(*b*) Two warehouses located on the pier; one 100 by 800 feet and a second 100 by 550 feet. Both warehouses were heated.

(c) Three railroad spurs located on the pier, one providing service inside the larger warehouse.

The replacement value of the facilities destroyed were estimated to cost $9,683,000.

Mr. RILEY. Is there any space there that some private enterprise could acquire to put in a dock for commercial use?

Mr. FOSTER. There would be some limited space, Mr. Chairman, but not a great deal of it. The flat- or level-land area is so limited that all there is is the water frontage. There is not enough level land behind it to give you access. I have a map here if you would like to look at it, but the installation at Whittier is on a triangular flat portion of land in a big fjord, and across the water and on either side of the port the mountains come down precipitously into the sea.

Mr. FORD. Are your proposed facilities fully utilized? In other words, when this new dock is constructed, with what other facilities you have on hand, would there be time during the day or night during the year when they might be used by commercial operators?

Mr. FOSTER. I would have to get confirmation, Mr. Ford, but it is my understanding that although there would, of course, be times when vessels could dock, there is not sufficient transient storage or space on the land side, nor sufficient agress from the port area to handle it. May I confirm that for the record?

(The information requested is as follows:)

The Army is aware of no legal barrier to an arrangement that would permit the use of the dock at Whittier by private enterprise. In case of a bona fide emergency in which a ship had been rendered unseaworthy due to storm or other condition arrangements could and would be made to berth such ship until it could be again put in seaworthy condition or its owners could make satisfactory arrangements for its disposition. However, it must be pointed out that there is a complete lack of housing facilities for stevedore personnel at Whittier and were private enterprise permitted to use the dock they would have to import this personnel from elsewhere. The lack of sufficient transit facility at Whittier presently hampers efficient operation of the port and the use of the dock by private enterprise would greatly aggravate this condition.

Mr. FORD. I think it would be helpful, at least, to get an answer to this question. You indicated that your new dock is to be constructed at a cost of $6 million.

Mr. FOSTER. $6.4 million.

Mr. FORD. And that it was to be constructed to handle the types of ships which the military has. Are there any significant differences in the sizes of these ships which would preclude commercial operators from using those facilities?

Colonel SHULER. No, sir.

Mr. FOSTER. No, sir.

Mr. FORD. They could be used?

Colonel SHULER. Yes, sir.

Mr. FORD. That is all.

Mr. RILEY. All right, take the next item, Colonel.

WILDWOOD STATION, KENAI, ALASKA

Colonel SHULER. The next station is a station with a classified mission. It is on page 506 in the big book, Wildwood Station, Kenai, Alaska.

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This is an Army Security Agency station, and we are asking for three facilities, as follows: A dormitory addition to the post fire station, $16,000; civilian bachelor quarters, $136,000; and a post chapel with religious and educational facilities, $317,000; or a total of $469,000.

DORMITORY ADDITION TO POST FIRE STATION

This project is required to provide dormitory space in the existing fire station. Original plans called for fire-department personnel living in enlisted-men barracks, but experience shows that the time factor involved could cause serious loss in life and property. All family housing on this post are wood-frame structures, and the loss of a few minutes in getting organized could cost thousands of dollars, especially since this isolated area is covered with swamps, grass, and forest, extremely susceptible to fire. Isolation requires the maintenance of two fire trucks, both ready for action in seconds. Provision of the proposed dormitory would result in all men being available for instantaneous action. The 313 SF in excess of normal allowances is essential to meet dormitory requirements.

CIVILIAN BACHELOR QUARTERS

This project is required to provide suitable quarters for bachelor civilians now housed in enlisted-men barracks. Present practice is unsatisfactory due to diversion of space from intended use and differences in policies relative to civilian and enlisted personnel. Due to isolation of this installation, off-post housing is extremely limited and, in most instances, undesirable.

POST CHAPEL WITH RELIGIOUS EDUCATIONAL FACILITIES

This project is required to provide a suitable facility for the spiritual, welfare, and morale needs of 530 military and civilian personnel and 157 dependents. The additional space (basement) is essential for dependents' activities, such as Boy and Girl Scout meetings, church socials, and related functions, for which space is not available in other facilities. Presently, religious services are conducted in an inappropriate and inadequate enlisted men's dayroom (50-person capacity).

Mr. RILEY. Off the record.

(Discussion off the record.)

Mr. RILEY. All right; take the next station, Colonel.

REHABILITATION OF EXISTING FAMILY QUARTERS, ALASKA

Colonel SHULER. The next item, sir, is an item which you will find on page 80 of the family-housing book, entitled "Rehabilitation of Existing Family Quarters, $1,656,000," in various locations in Alaska.

These locations, sir, are at Eielson Air Force Base, Ladd Air Force Base, and Fort Richardson, Alaska.

I would like to explain this project, Mr. Chairman, and be very frank with this committee in stating that this project is needed to correct deficiencies in the design of the family-housing units which were built in 1951 to 1953.

The following items are included in this improvement project: The installation of hardwood floors on the second stories where softwood was used initially which contained as high as 12 percent moisture; the insulation of floors above mechanical rooms to prevent excessive heat in the rooms above; replacement of glass block windows in utility rooms with hinged windows to allow complete ventilation; change from a high- to low-pressure steam system so that it does not get real hot at one end and real cold at the far end; insulation of steam lines to eliminate heat losses and reduce fuel costs; and to clean and replace traps and strainers to eliminate condensate return-line noises.

At the time these houses were built the Army was attempting to reduce the initial cost to the absolute minimum in line with the austerity policy which was in effect at the beginning of the Korean war when we started this construction. The proposed improvements are necessary in order to reduce maintenance costs. The total amount requested is $1,656,000. These improvements to existing family quarters also are essential to provide necessary comfort for occupants.

Mr. RILEY. Is Eielson Base where you had something similar to Wherry housing?

Mr. FOSTER. No; Mr. Chairman, Elmendorf Air Force Base is probably what you are thinking of.

Mr. RILEY. Yes.

These were all constructed by the Army?

Colonel SHULER. Yes, sir; under contract.

Mr. FORD. Was it the fault of the design, or was it the fault of the contractor?

Colonel SHULER. I would say that it was partially the fault of the design and partially the fault of omission in order to save money in accordance with the austerity program because of the amount of funds that we had for the project. But we must admit that some of the fault was in the original design.

Mr. RILEY. It is another case, as I see it, of being pennywise and pound foolish. Instead of building adequate structures in the beginning we have to come back and pay for them a second time.

Colonel SHULER. Yes, sir.

Mr. FORD. Are these facilities well worth rehabilitation?

Colonel SHULER. Oh, yes, sir. They are permanent type housing, and I believe that these improvements and corrections will make them comparable with other permanent housing throughout that area.

DEFICIENCIES IN ORIGINAL CONSTRUCTION

Mr. ZACKRISON. The main difficulty is due to the establishment of extremely low standards in order to meet the cost we were attempting to meet.

The cost limitation was about $16,000, and we awarded the contracts for these houses within that amount. This resulted in our having to build housing without the benefit of radiators in the basement; in lieu of providing them we just left the pipes uncovered with the result that too much heat was emitted by the uncovered pipes, and we could not regulate the heat. We had no adequate controls in the heat-

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ing system from one end to the other, and you would get extreme heat at one end, and extreme cold at the other with too much variation in the building.

We specified too low a grade of flooring. On the second floors while the flooring might have been called satisfactory in the sense that it would serve it did not look well, and it did not wear well with the result that we are required to replace it at this time.

Now, it is things of that sort which we are trying to correct.

I would like to say that is one of the reasons perhaps why in our current housing program elsewhere we are not going to get housing in all instances and be able to meet the current cost limitations on housing, because we decided it was pennywise and pound foolish, as you expressed it a little while ago to build substandard quarters.

Fort Buckner, Okinawa, Ryukyu Islands

Colonel Shuler. Mr. Chairman, the next installation is on page 511 of the large book and on page 82 of the family housing book. It is Fort Buckner, Okinawa, in the Ryukyu Islands.

The committee will recall that I testified at some length on the land requirements on Okinawa before the full committee, I will read the list of items which we are requesting.

Utilities, eighth increment, $159,000.
AFRS and TV studio, 7,000 square feet, $175,000.
Dental clinic, 7,800 square feet, $188,000.
Dispensary, 6,000 square feet, $144,000.
Three battalion headquarters and classroom buildings, 18,000 square feet, $238,000.
High school, 225,000 square feet, $3,680,000.
Elementary school, 55,250 square feet, $925,000.
Utilities, ninth increment, $541,000.
Administration building (PE), 4,600 square feet, $61,000.
Motor park facilities (PE), $147,000.
Battalion motor park facilities (FA), $168,000.
Battalion gun park facilities (FA), $124,000.
Battalion headquarters building (FA), 6,000 square feet, $79,000.
Two Battalion headquarters buildings (AAA), 5,200 square feet, $69,000.
Tank park facilities, $53,000.
Milk reprocess and ice cream plant, 54,000 square feet, $637,000.
Fence (Mach service area), 32,000 linear feet, $240,000.
Finance building, 9,75 square feet, $168,000.
Telephone system (Sukiran), $50,000.
Telephone System (Mach-Nala Hsng, Mach Svc Area and Maha Port), $25,000.
Chapel (AAA area) 13,100 square feet, $275,000.
Pumping station, Naha tank farm No. 2, $509,000.
Marine fuel dispensing station (Naha), $120,000.
Sea water pumping station (Naha), $11,000.
Chapel (Mach Service area), 3,940 square feet, $83,000.
Utilities (10th increment), $150,000.
Central post office, 18,000 square feet, $333,000.
Motor park facilities (MHE), $148,000.
Land acquisition, 59,277/58,826 acres, $30,000,000.
Central pastry and bakery shop, 16,500 square feet, $453,000.
4 POL tanks (Chimm-Wan tank farm), 160,000 barrels, $1,230,000.
Hardstand, open storage (Mach Service area), 226,667 square feet, $1,020,000.
123 family quarters, $2,300,000.

and the amount of the total request is $44,503,000.

UTILITIES (8TH INCREMENT)

This project is required to provide trunk distribution and service utilities for Armed Forces radio station and TV studio, the dental clinic, the dispensary, the battalion headquarters, and classroom buildings, and the two schools. These buildings are new facilities required in the performance of the station mission. Therefore, the extension of various utility systems is necessary in order that the functions for which these buildings were designed may be accomplished. Utility service to these buildings has not been previously provided.

AFRS AND TELEVISION STUDIO (SUKIRAN)

This project is required to complete the new 1,000-watt AFRS radio and television system, the transmitter building and antenna field which are under construction from the fiscal year 1955 program. New radio equipment is on hand and is being operated in a 1,200 square foot quonset in the Sukiran area in connection with the old 250-watt system. This quonset does not allow sufficient space as studios for live programs, rehearsal, control, and administration required by the new system. AFRS provides outlet for entertainment, TI&E activities, and island-wide alert warning system in the event of emergencies and serves approximately 50,000 Americans and a fringe audience of 150,000 Okinawans. KSAR, a foreign-language station, is the only other radio station on Okinawa. Upon completion of new system, the presently used quonset will be dismantled and salvageable material returned to depot.

DENTAL CLINIC (SUKIRAN)

This project is required to provide adequate dental treatment (including general dentistry, orthodontia and prosthetic work but excluding oral surgery) for 9,000 troops in the Sukiran area, 7,000 Army dependents island-wide and emergency treatment for 4,350 DAC employees and dependents. Twenty-nine chairs are authorized for Fort Buckner: 20 are in the proposed facility; 2 are in the Naha dispensary for 1,000 troops; 2 are in the Machinato dispensary for 1,000 troops; and the remaining 5 are in Rycom Hospital. Naha and Machinato dispensaries will provide general dentistry and emergency service and Rycom Hospital will provide general dentistry for hospital patients and detachment and all oral surgery. Estimated monthly patient load at Sukiran clinic is: 2,500 fillings, 250 prosthetic work, 500 extractions, and 150 orthodontis treatments. Existing facilities consist of: Naha new dispensary, 2 chairs; Rycom old hospital, 8 chairs (quonset); Machinato, 2 chairs (quonset); Napunja, 2 chairs (quonset); and Sukiran, 11 chairs (enlisted men's barracks). After construction of proposed clinic, quonsets (except at Machinato) will be dismantled and salvageable material returned to stock.

DISPENSARY (SUKIRAN)

This project is required to provide medical care for 9,000 troops, 6,000 Army dependents and emergency treatment for 4,300 DAC's and their dependents in the Sukiran area. Facility will contain waiting rooms, examination, immunization, consultation, X-ray and treatment

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rooms, pharmacy and administrative space. Surgery, laboratory, and pathological work will be done at the hospital. Estimated daily patient load is: 98 troops, 40 Army dependents, and 2 emergency cases. Medical treatment for Sukiran area troops is now provided in a 2,926 square foot dispensary in a barracks. Outpatient service for 6,000 Army dependents and 4,300 DAC's and dependents is now provided in 2 quonsets (4,480 square feet) in the temporary Rycom Hospital area. A dispensary is an integral part of the troop and family housing support constructed in the Sukiran area. Troop space now utilized will be released for troop housing.

THREE BATTALION HEADQUARTERS AND CLASSROOM BUILDINGS (SUKIRAN)

This project is required to provide administration space and classroom facilities for each of the three infantry battalions at Sukiran. Each building will provide office space for the commanding officer and executive, and battalion staff functions, namely, intelligence, operations, and supply, and classrooms for visual and oral instructions to troops on squad, platoon, company, and battalion operations. Storage space for training aids and signal and engineer equipment assigned to a battalion is also provided. Each battalion consists of 729 officers and men. Pending construction of battalion headquarters facilities, it will be necessary to utilize 3,980 square feet of troop space in barracks of each battalion.

HIGH SCHOOL

This project is required to provide high school facilities for children of American citizens serving the United States Government on Okinawa. Total students 1,995 (Army, 1,184; Air Force, 775; Navy, 17; and others 19). Facilities to be provided are no more than those normally provided by public school systems in the United States. Project is part of the plan to provide adequate school facilities for American children on Okinawa, the First Army increment of which has been accomplished by completion of a new elementary school at Sukiran in 1954. Student load does not permit usage of elementary school as high school also. High school classes are now held in a series of quonsets and 2 prefabs located at Kubasaki and having a total floor area of only 67,280 square feet, which does not permit development of a full high school curriculum. Upon completion of proposed high school, quonsets and prefabs will be dismantled and salvageable material returned to depot and land returned to indigenous economy.

ELEMENTARY SCHOOL (MACHINATO-NAHA AREA)

This project is required to provide elementary school facilities for 600 children of American citizens serving the United States Government on Okinawa and living in the 1,457 family quarters at Machinato-Naha area. Facilities to be provided are no more than those normally provided by public school systems in the United States. Proposed facility is final increment of the plan to provide adequate elementary school facilities for American children on Okinawa, the First Army increment of which was completed with the building of an elementary school in Sukiran area in 1954. Elementary school classes are

now being held in 17 quonsets and a prefab located 15 miles away (in Sukiran-Awase area) and having a total floor area of only 28,000 square feet which does not permit the development of a full elementary school curriculum. Upon completion of the proposed facility, the quonsets and prefab will be dismantled and salvageable material returned to depot and land returned to indigenous economy.

UTILITIES (NINTH INCREMENT)

This project is required to provide trunk distribution and service utilities, 14 buildings, in the Okinawa fiscal year 1956 program. Buildings are new facilities required in the performance of the station mission, therefore, the extension of various utility systems is necessary in order that the function for which these buildings were designed may be accomplished. Utility service to these buildings has not been previously provided.

ADMINISTRATION BUILDING (POST ENGINEER)

This project is required to provide Fort Buckner post engineer administrative facilities, including cost accounting and property records activities, engineer office, vault, storage space, miscellaneous office space, heater room and latrines. Two hundred and nineteen post engineer personnel to use proposed facility including 22 military 71 DAC, 19 foreign nationals and 107 Okinawans. Post engineer responsibility is double that for a continental United States installation of the same strength and includes 400 miles of primary and secondary power lines, 150 miles of paved roads, 5,000 structures, 130 miles of water lines, 100 miles of sewer lines, packing and crating and so forth. Present post engineer administration facilities are housed in a frame building and 4 prefabs (totaling 30,000 square feet) which will be dismantled and salvageable material returned to depot upon completion of proposed facility.

MOTOR PARK FACILITIES (POST ENGINEER)

This project required to provide maintenance, repair and servicing facilities for 250 post engineer cars, trucks, bulldozers, road patrols, cranes, power shovels, garbage collection trucks, and other miscellaneous special vehicles. Maintenance shop will include body and fender repair shop, paint, tire, and battery shop, stockroom, toilets and office space. Existing facilities consist of 7 frame buildings (9,000 square feet of floor space) and 160,000 square feet of unpaved hardstands located at Sukiran. Upon completion of proposed motor park, frame buildings will be dismantled and salvageable material returned to depot.

BATTALION MOTOR PARK FACILITIES, FIELD ARTILLERY (SUKIRAN)

This project is required to provide facilities for repair and servicing of approximately 200 vehicles of the field artillery battalion located in the Sukiran area. Need is now being met by sharing with the tank company temporary coral surfaced parking area of 13,888 square yards in the Futema area. Interim area is planned as site

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for family quarters under the approved master plan and contracts have been awarded for this construction.

BATTALION GUN PARK FACILITIES, FIELD ARTILLERY (SUKIRAN)

This project is required to provide maintenance and repair facilities for the field artillery battalion located in the Sukiran area. Proposed facilities will permit efficient and proper care and maintenance of field pieces and equipment. TO&E authorizes 18 field pieces and attendant impediments; however, this battalion is now operating at reduced strength and has only 12 field pieces. Need is now being met by sharing with the tank company 13,888 square yards of temporary coral surfaced hardstand in the Futema area. Interim area is planned as site for family quarters under the approved master plan and contracts have been awarded for the construction of these quarters.

BATTALION HEADQUARTERS AND CLASSROOM BUILDING, FIELD ARTILLERY (SUKIRAN)

This project is required to provide administration space and classroom facilities for the field artillery battalion located at Sukiran. The headquarters battalion will provide office space for the commanding officer and executive, and battalion staff functions, including intelligence, operations and supply, and classrooms for visual and oral instructions to troops. Storage space is also provided for battalion equipment. Pending construction of the proposed facility, it is necessary to utilize 3,700 square feet of troop space in a barracks of the battalion.

TWO BATTALION HEADQUARTERS BUILDINGS, AAA (SUKIRAN)

This project is required to provide administration facilities for each of the two AAA battalions at Sukiran. Each headquarters building will provide office space for the commanding officer and executive, and battalion staff functions, including intelligence, operations and supply. Storage space is also provided for battalion organic equipment. Pending construction of the proposed facilities, it is necessary to utilize 4,000 square feet of troop space in the barracks of each battalion.

TANK PARK FACILITIES

This project is required to provide parking area and list and 2d echelon maintenance for 22 tanks, 17 trucks, 16 gun carriages (full tracked), tank retriever (full track), and tank maintenance vehicle (full track). Vehicles to be stored are organic to the tank company and AAA automatic weapons battery. A coral-covered area of 13,888 square yards at Futema is now being used as a tank parking area.

MILK PROCESSING AND ICE-CREAM PLANT

This project is required to provide an adequate structure in which to process milk and milk products under contract with International Dairy Supply Co. for American citizens (including dependents) serving the United States Government on Okinawa (37,200 adults; 14,687

children). Daily plant capacity (based on 17-hour operation) is 3,000 gallons of milk and 1,100 gallons ice cream but plant will normally operate only 10 hours per day. Plant design, developed in conjunction with the dairy company, provides space shown above and allows 120-day supply level. Dairy company operations presently occupy 6 emergency-type structures (15,000 square feet) outside of areas being retained by United States forces. Upon completion of proposed facility, existing buildings will be dismantled and salvageable material returned to depot.

FENCE (MACHINATO SERVICE AREA)

This project is required to provide 32,000 linear feet of 9-foot perimeter fence around the Machinato service area to prevent or reduce loss by theft, to preclude intentional and unintentional trespass, to control entrance and egress, to reduce number of security guards required for the area, and to minimize possibility of sabotage. Machinato service area is the principal storage and maintenance area for Fort Buckner and contains supplies valued at approximately $7.5 million. Pilferage by persons, within and without the area (at the rate of one-half percent annually) represents a loss of $375,000. This risk will be considerably reduced or eliminated by a security fence which will channel all vehicular and pedestrian traffic through six openings, thus providing opportunity for search. Limited protection is now provided by 21 security guards at an annual cost of $9,600. Construction of the security fence will substantially reduce the $375,000 annual pilferage loss, permit a 50-percent security-guard reduction, preclude or definitely establish acts of trespass, and provide control of entrance and egress of vehicles and persons.

FINANCE BUILDING

This project is required to provide a suitable facility in which the Army Finance and Accounting Office for Okinawa may perform functions not accomplished by commercial banks on Okinawa. Recent reorganization of finance activities to include accounting activities of the Comptroller results in a 50-percent increase in personnel over that indicated in AR 415–31. Presently used prefab structure (9,497 square feet) in the Camp Kue area was constructed with GARIO funds for housing United States civil affairs, Ryukyus administrative operations.

TELEPHONE SYSTEM (SUKIRAN)

This project is required for the procurement and installation of the last increment of materials necessary to complete telephone and fire-reporting services in the Sukiran, Rycom, and Camp Kue areas.

TELEPHONE SYSTEM (MACHINATO-NAHA HOUSING AND PORT AREA)

This project is required to provide final increment of $100,000 telephone service for Naha Port and Machinato-Naha housing and service areas. The 2,000-line dial-control office connects with 3 offices of the islandwide telephone system.

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CHAPEL (AAA AREA)

This project is required to provide chapel with religious educational facilities for AAA troops and military and civilian personnel (and their dependents) of all faiths living in the AAA area or vicinity of Sukiran and Futema areas. Project will serve 9,000 troops, 2,052 families, and 3,300 children. In addition, structure will provide chaplains' offices, sacristy, general-purpose room, latrines, and storage space. Those to be served now attend services and functions in a new 12,000-square-foot chapel in the Sukiran area and 2 quonsets in the Plaza and Kue areas. The new chapel was built to serve 5,500 troops in the service troop and regimental combat team areas and is being used only as an interim measure pending construction of the proposed facility in the AAA area. Eight separate services are held in the new chapel each Sunday with many worshipers required to stand throughout the service. Existing quonsets will be dismantled and salvagable material returned to depot.

PUMPING STATION (NAHA TANK FARM NO. 2)

This project is required to complete the islandwide POL distribution system; it will pump POL products from Naha to Kadena and/or Chimuwan tank farms. Present station is incapable of handling the transfer of quantities of POL products required. The three 1,000-barrel-an-hour high-pressure pumps are required due to Kadena and Chimu Wan having a 200-foot higher elevation than Naha Station.

MARINE FUEL DISPENSING STATION (NAHA)

This project is required to service the Rycom fleet of 34 vessels (6 FS boats, 6 j boats, 5 LCM, 3 L tugs, 2 floating cranes, 2 FMS, T boat, fire boat, patrol boat, LSM, Y boat, LCT boat, S tug, BC, BK, and BCL) which provides service to Air Force and Army installations on outlying islands as well as United States civil administration of the Ryukyu Island. Fleet provides assistance in docking incoming ocean vessels, delivery of POL products and necessary work detail for operation of Okinawa harbors. Presently, fueling of above vessels is accomplished by tank trucks or, when in port, by the Y boat. Due to operation of district engineer at Machinato Inlet and operational requirements of White Beach, the Y boat is not always available. Proposed project includes provisions for dispensing POL products to tank trucks for local distribution, thus eliminating necessity for tank trucks to go to Naha tank farm No. 2, 5 miles away.

SEA WATER PUMPING STATION (NAHA)

This project is required to provide fire protection for Naha Port facilities of an estimated value of $20 million. Construction of this pumping station will enable salt water to be pumped through existing POL supply lines to the port area for fire protection. This salt-water fire-protection system will supplement the existing fresh-water system.

CHAPEL (MACHINATO SERVICE AREA)

This project is required to provide chapel facilities for 1,815 troops of all faiths assigned to the Machinato service area. In addition, the chapel will provide chaplains' offices, sacristy, general-purpose room, latrines, and storage space. Service for troops to be served are now held in a 1,800-square-foot quonset which will be dismantled and salvagable material returned to depot upon completion of proposed chapel.

UTILITIES (10TH INCREMENT)

This project is required to provide roads, walks, drainage, and service utilities to the camp's post office, motor-park facilities, and the camp's pastry and bakery shop. Buildings are new facilities requested in fiscal year 1956 and are required in the performance of the assigned mission, therefore, the extension of various utility systems is necessary in order that the functions for which these buildings were resigned may be accomplished. Utility services to these buildings have not been previously provided.

CENTRAL POST OFFICE

This project is required to provide main post office facilities for 26,000 troops, 17,600 dependents, and 4,00 others having access to the United States postal system on Okinawa. Facility will provide 7,200 square feet for sorting and pouching, and areas for directory service, money orders, registry service, claims, loading and unloading facilities, storage, latrines, and administrative space. Main post office serves 2 Army and 3 Air Force APO's and a Navy FPO and handles approximately 200 tons of mail per month. Surface mail must be held for ship sailings. Incoming surface mail causes peak loads. All incoming surface and air mail must be broken down and pouched for distribution to unit post offices. Postal operations are now located in 10,000 square feet of a transit warehouse at port of Naha. Post office administration is from Sukiran. Upon completion of proposed facility, space in transit warehouse will be returned to transit storage.

MOTOR PARK FACILITIES (MHE)

This project is required for maintenance and repair of 475 material-handling items assigned to the various technical services. Proposed project will be located in the Machinato service area. Existing facilities are located at Tengan in 3 prefabricated and quonset structures (total of 40,848 square feet) which are to be dismantled and salvagable material returned to stock, and land returned to indigenous landowner. Proposed project will provide a consolidated second echelon maintenance shop and preclude necessity of establishing separate organizational maintenance shops for each service.

LAND ACQUISITION

The Army, as executive agent for the Ryukyus Command, seeks authorization for the acquisition of all lands required by United States forces and other Government agencies on the island. A break-

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down of land requirements has already been given in the record. Acreage is based on present permanent troop strengths and future commitments. Valuation of Army and Air Force requirements are based on values as of July 1, 1954. Valuation of Navy requirements are based on values contained in a preliminary report prepared by the Navy in January and February 1955. Funds are being requested only for lands required by Department of Defense agencies.

GENERAL PASTRY AND BAKERY SHOP

This project is required to replace a badly deteriorated quonset and frame structure (total of 17,360 square feet) located in the Tengan area, 15 miles north of the center of troop population. Proposed facility will provide a bakery and general pastry shop to serve the needs of all Armed Forces personnel and personnel of other United States agencies on Okinawa (approximately 37,000 persons). New facility will be located in the Machinato service area. Existing structures will be dismantled and salvagable material returned to stock.

POL TANKS (CHIMU WAN TANK FARM)

This project is required to complete Chimu Wan POL Farms Nos. 1 and 2 which are an integral part of the islandwide POL system serving the Army, Air Force, and Navy units on Okinawa.

HARDSTAND, OPEN STORAGE (MACHINATO SERVICE AREA)

This open storage area is required to provide storage for the Engineer, Quartermaster, Signal, and Ordnance in the Machinato service area adjacent to their covered storage in order to permit proper administrative control and security. Present areas utilized by the technical services mentioned above are dispersed throughout the Machinato service area. These areas are not properly drained or graded and, as a result, proper use of these open storage areas are limited.

Mr. RILEY. Off the record.

(Discussion off the record.)

HIGH SCHOOL

Mr. RILEY. Colonel, I note here that you propose to build a new high school building at the cost of $3,680,000 at this station. Is that for the exclusive use of the children of Army personnel and their civilian employees, or will that serve other defense force personnel too?

Colonel SHULER. That will serve the Army, the Navy, the Air Force, and all United States Government employees stationed on the island, and the total number of students involved is 1,995.

Mr. RILEY. We might call it a consolidated school, then, for all services?

Colonel SHULER. That is correct.

Mr. RILEY. For the children of the personnel of all services?

Colonel SHULER. That is right, and the same goes for the elementary school, Mr. Chairman.

AFRS AND TELEVISION STUDIO (SUKIRAN)

Mr. RILEY. Could you give us a little information about this TV studio? Just what is the purpose of that?

Colonel SHULER. Mr. Chairman, this project is required to provide a safe and adequate typhoon-resistant structure to house the broadcasting facilities on Okinawa, for the production and transmission of radio and television programs for all personnel on the island.

This broadcasting facility furnishes the following services to all Armed Forces personel and civilian personnel of other Government agencies, numbering about 50,000 people:

First, it provides security against the elements of nature; that is, typhoons and earthquakes.

It provides a means whereby the commander can effectively reach his troops.

It is an integral part of the troop-information program, which is an officially organized program of the Army, and it provides world news and entertainment to the many Americans and Okinawans on the island, so it does have quite a varied use which is quite important in the Okinawan defense mission.

TELEPHONE SYSTEM

Mr. RILEY. The telephone system could be described in the same manner; could it not?

Colonel SHULER. Yes, sir.

UTILITIES

I would like to describe one other thing here, Mr. Chairman, with your permission. You will note here three increments for utilities. You notice the first item is "Utilities, 8th increment," and then down the page there is "Utilities, 9th increment," and then on the next page, "Utilities, 10th increment."

Mr. RILEY. Yes; I noticed that.

Colonel SHULER. As you well know, sir, in our construction we normally put the utilities cost in with the item. In the case of Okinawa we master-planned the entire island for the permanent construction, and you will notice that each of these utilities increments contains all of the utilities money to support all of the items that follow it down to the next utilities increment item. That is because of the master planning of all of the utilities systems in one master plan.

LAND ACQUISITION

Mr. RILEY. As I recall, you testified rather fully on land acquisition before the full committee?

Colonel SHULER. Yes, sir; I gave a breakdown of the land acquisition and the need for it. In addition I have Mr. Wohl here from Civil Affairs and Military Government Division of the Department of the Army and he is completely familiar with this entire thing, and he will be very glad to answer any questions you might have, sir.

(NOTE.—The testimony referred to may be found in the volume containing general statements.)

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HARDSTAND OPEN STORAGE

Mr. RILEY. Your hardstand is open storage. Does that work very well in this area which is subject to storms, typhoons, and things of that kind?

Colonel SHULER. Mr. Chairman, it naturally would be better to have a concrete, typhoon-resistant closed structure for most of the storage, although some of it could be left outside, regardless, but it is so expensive to do that completely that we have to draw a balance between what we must get inside of the building and what is safe to leave outside.

WEATHER IN RYUKYU ISLANDS

I would like, with your permission, to put into the record a recapitulation of the weather in the Ryukyu Islands.

Mr. RILEY. Maybe you have educated us pretty well already.

Colonel SHULER. The average number of rainy days per year is 202. The average annual rainfall is 82.8 inches. The mean annual temperature is 72 degrees. The mean maximum, 78 degrees. The mean minimum is 66 degrees, and the highest ever recorded is 96 degrees, and the lowest 61 degrees. So, as far as temperature goes it is fairly mild, but the rainfall is heavy. The annual average humidity is 79 percent.

The typhoon season is normally from May through October, although they have occurred every month of the year. August is the most critical month. From 40 to 60 typhoons may pass near the islands and affect them, and locally from 3 to 6 typhoons are expected to pass directly over the islands and affect them. Winds as high as 170 miles per hour occur.

Mr. RILEY. What is the health situation there as a result of this long rainy season and high humidity?

Colonel SHULER. The only critical situation I know of, sir, is the matter of fungus growth. People get it in their ears and in other vital places, and it is a very difficult thing to cure. I know personal friends of mine, sir, who have been 4 or 5 years now under treatment on that account. It is the same thing as in the Guadalcanal area and the humid areas of the South Pacific. Outside of that I think the health condition there is about normal.

Mr. RILEY. And the well-constructed building that can be kept fairly dry, for want of a better word, tends to alleviate some of that?

Colonel SHULER. Yes, sir; they would go a long way toward alleviating the condition of the fungus growth I have described, sir.

Mr. RILEY. Do you have any questions, Mr. Ford?

UNIT COST OF HIGH SCHOOL

Mr. FORD. In looking over these justifications I note that the unit cost of the high school is $16.35, that the unit cost of the battalion headquarters and classroom buildings is $13.20, and the unit cost of the central post office is $18.50. It is my recollection that the unit cost of the buildings under the proposed GARIOA school construction program was around $4. There is quite a variation. Why are you building a post office that has a higher unit cost than some of these other buildings?

Mr. FOSTER. Incidentally, the answer to that question was placed in the record for the 21st of June, before the full committee.

(NOTE.—The information referred to may be found in the volume containing general statements.)

The school buildings built with GARIOA funds for Okinawan children are 1-story concrete and brick structures, with only most rudimentary plumbing and electric fixtures in them with a minimum of heating arrangements required, and with 1 small room for the teacher or principal. The cost runs between $2.50 and $3 a square foot for those buildings.

These buildings here will be western-type modern school buildings with blackboards, cloakrooms, drinking fountains, modern plumbing, modern lighting, and modern ventilation in them. The cost is based on designs made by the Okinawa district engineer.

Mr. FORD. Are we shipping, for example, brick from the United States to build a school building in Okinawa?

Colonel SHULER. No, sir; we are not.

Mr. FOSTER. No, sir; virtually none of these construction materials in Okinawa come from the United States. Some of them are prepared locally, as in the case of concrete block, and some are shipped in from Japan.

Mr. FORD. It seems to me that to construct a high-school building within the United States in most of the areas I am familiar with are about the size that you have here, the price is about the same that you have here.

Colonel SHULER. But it is not typhoon resistant, Mr. Ford, nor is it earthquake resistant in some cases, and this has to be both in Okinawa because the typhoons will just take down anything unless it is typhoon resistant, and that does run the cost up considerably on all of the construction in Okinawa.

TYPHOON-RESISTANT CONSTRUCTION

Mr. FORD. Could you put in the record so that a layman can understand it what you mean by typhoon-resistant construction?

Colonel SHULER. We can do it right now. Mr. Zackrison, Chief of the Engineering Division, Office of the Assistant Chief of Engineers for Military Construction, is here and can give you that information now.

Mr. ZACKRISON. The buildings are built to resist wind forces of 170 miles per hour. The pressures are 70 pounds per square foot.

Colonel SHULER. I believe the question was, How do you do that?

Mr. ZACKRISON. That is done generally with reinforced concrete buildings, generally 1-story but sometimes 2-story. It means the columns are much heavier.

Mr. MILLER. What about the windows and doors; does it affect them?

Mr. ZACKRISON. Yes. We generally provide shutters of some kind.

Mr. RILEY. You have to have heavier reinforcing steel?

Mr. ZACKRISON. Yes. A column will be 4 or 5 times stronger than normally used.

Mr. MILLER. Do you have water damage to contend with too with these typhoons?

Mr. ZACKRISON. Yes. We generally have poured concrete walls to make them water resistant.

Mr. MILLER. I had in mind if you had tides or flash floods that went with the typhoons.

Mr. ZACKRISON. That is not the real problem here.

Mr. MILLER. It is wind?

Mr. ZACKRISON. It is wind primarily.

Mr. FORD. The second part of the question was why is there such a variation between the unit cost of the high school, the battalion headquarters, and the post office?

UNIT COST OF POST OFFICE

Colonel SHULER. Mr. Zackrison, can you describe why the unit cost of the post office is——

Mr. FORD. $18.50 per square foot, and the battalion headquarters, $13.20, and the high school $16.35.

COMPARATIVE UNIT COST

Mr. ZACKRISON. I cannot for these specific buildings, but these costs are pretty much in line with the costs for similar buildings in this country. The costs in Okinawa are pretty close to those in this country.

Colonel SHULER. You had better explain in that regard that even though the construction is more expensive materialwise it is the labor cost that makes it about equivalent to the cost in this country. We spend more for material in that country.

Mr. RILEY. You get heavier and better construction there than in the States for the same cost?

Mr. ZACKRISON. In such construction as they utilize local labor. Were the proponderance of material must be imported from the States the costs are higher. In housing, the cost is equivalent to or lower than in the States.

Mr. FORD. It does not make sense to a layman to have a higher unit cost for a post office than for a battalion headquarters.

Colonel SHULER. Off the record.

(Discussion off the record.)

Mr. ZACKRISON. I think you will find the post offices, wherever you build them, are more expensive than school buildings. I will furnish a statement on that for the record.

Mr. RILEY. I think it would be well if you would do so.

Mr. FORD. I think we ought to have it because on the surface it does not make sense to have that much variation. It is one-third higher when you compare the post office to the battalion headquarters.

Mr. ZACKRISON. The post office is a more complicated building.

Mr. FORD. You might also add to that; why, the general pastry and bakery shop has a unit cost of $18.75 per square foot.

Mr. FOSTER. It is the equipment that runs the cost up on that.

Colonel SHULER. In many cases we have equipment charged to MCA.

Mr. FOSTER. I beg your pardon, Mr. Ford; equipment cost is not included in that $18.75.

Colonel SHULER. It is in the total cost, but not in the square footage cost of the building to which you refer.

Mr. FORD. I should think a general pastry and bakery shop would be a relatively simple building.

Colonel SHULER. We will add that to the list.

(The following information was submitted for the record:)

SCHOOLS

The following additional features are required in schools that are not included in the battalion administration building; blackboards, bulletin or map boards, cafeteria, auditorium, gymnasium, greater amount of partitions and doors per square foot of floor, additional electrical load, additional plumbing, etc.

A review of school costs in the continental United States as shown on pages 150–151 of the Bulletin of the American Institute of Architects titled "AIA National Building Cost Survey," dated September–October 1954, indicates an average square foot cost of $17.51 per square foot exclusive of architect-engineer fees and contingencies.

BAKERY

The following additional features are required in bakeries that are not included in the battalion administration building; additional requirements for all mechanical services, installation of large pieces of equipment, increased ceiling heights and ventilation requirements, higher quality finishes for health requirements, etc.

A project bid at Fort George G. Meade, Md., in 1952, based on low bid, was $15.77 per square foot exclusive of architect-engineer fees and contingencies.

POST OFFICE

The following additional features are required in post offices that are not included in the battalion administration building; vaults, cages, counters, clerestory for central work area, etc.

Information from other Government departments engaged in post-office construction indicates a range in construction costs from $12.50 to $20 per square foot exclusive of boxes, counters, mail drops, etc., that are furnished by the Post Office Department and architect-engineer fees and contingencies.

Mr. FORD. That is all.

Mr. MILLER. I notice you have three battalion headquarters and classroom buildings. Are they substantially the same as buildings of this classification in this country or are they of an entirely different design?

Colonel SHULER. No, sir; they are not the same. These are combined battalion headquarters and classroom buildings.

Mr. MILLER. Is this a different kind of building designed to perform both functions?

Colonel SHULER. That is correct. It is a different type building designed to perform both functions. You will note at the top of the Form 68–c this is listed as a special design whereas the ones in the continental United States would be listed as standard plans.

Mr. MILLER. Is that because they are overseas or because of the typhoon element?

Colonel SHULER. Because of the type of unit and because of the location.

Mr. MILLER. In other words, they are specially designed to fit the particular requirements?

Colonel SHULER. That is correct.

LAND ACQUISITION

Mr. MILLER. Did we not have quite a discussion about land procurement? Is that in this?

Colonel SHULER. The chairman stated that we had covered that sufficiently.

Mr. MILLER. But this is where the land is going to be acquired?

Colonel SHULER. Yes. All these facilities will be built on land we already occupy which is part of the land we want to pay for.

Mr. MILLER. Off the record.

(Discussion off the record.)

FAMILY HOUSING

Mr. FORD. I notice in the housing portion you are requesting 123 family quarters and in the justifications you point out that you now have, 1,131 three-bedroom, 824 two-bedroom, and 291 one-bedroom quarters.

Colonel SHULER. Yes, sir.

Mr. FORD. I gathered from the justifications that those quarters and those requested here will house not only military personnel but key-civilian personnel?

Colonel SHULER. They will not only house key-civilian personnel, but other civilian personnel because of the housing situation there.

RENTAL CHARGE

Mr. FORD. That brings up another question. Back in 1951–52 when I was on the Civil Functions Subcommittee we got into the question of rents charged civilian personnel using Government-owned quarters, and finally, after some struggle under A 31, I think, of the Bureau of the Budget, we got some long overdue and highly necessary increases. In this kind of a situation where you have military personnel using some quarters and civilian personnel using other quarters, if the rents charged to civilian personnel are not adequate you have inequities between what the military personnel lose in rental allowance and what the civilians pay.

Colonel SHULER. That is true.

Mr. FORD. Do you have any idea as to what the rental charges are on the facilities presently available at Okinawa?

Colonel SHULER. I cannot answer that specific question but I can answer what the situation is in the continental United States. They are charged the rental on comparable housing in the nearest civilian community.

Mr. WOHL. I had occasion to discuss this question as to Okinawa with our Personnel Department, and I am informed the civilian personnel are furnished quarters in lieu of a quarters allowance the same as the military. My understanding is in Okinawa there would be a quarters allowance for the civilian personnel based on their grade.

Mr. FORD. So that in effect they are on the same basis as the military?

Mr. WOHL. Yes.

Mr. FORD. Off the record.

(Discussion off the record.)

Colonel SHULER. I cannot verify Mr. Wohl's statement as to Okinawa but the policy I gave as to the continental United States is essentially as I stated it. I will furnish additional information for the record.

(The following information was submitted for the record:)

EXTRACT COPY FROM AR 210-12, 12 JANUARY 1954

INSTALLATIONS

ESTABLISHMENT OF RENTAL RATES FOR QUARTERS FURNISHED FEDERAL EMPLOYEES

* * * * * * *

6. *Basic rate principles.*—(*a*) Rental rates for Army-controlled housing furnished civilians shall be set at levels prevailing for comparable private rental accommodations in the nearest year-round community. Seasonal rentals shall be discounted or modified appropriately.

(*b*) As an extension to the principle of equivalence with private housing practice, charges for utilities will be set at the local prevailing rates, if any, for similar services but in no event at less than cost to the Government. See AR 420-80.

* * * * * * *

(*a*) In isolated locations where no private rental housing is available in the vicinity of the station or activity for purposes of comparison, the nearest representative year-round private community will be used as a base.

* * * * * * *

(*d*) When an employee must accept quarters of a size or quality in excess of his normal preference, the rent (exclusive of utilities) will not exceed 20 percent of his gross salary (pay and allowances). This adjustment will be made only when it is not possible to offer him a choice of less desirable but adequate quarters at a rate less than the 20 percent rule.

* * * * * * *

(*g*) Any further variation of or substitution for the principle of equivalence will be authorized only by the Department of the Army. Consideration will be given only to those situations in which it can be conclusively demonstrated that employee compensation would not be supplemented through the distortion of station rent schedules.

* * * * * * *

Mr. FORD. That is all.

Mr. RILEY. Mr. Flood.

Mr. FLOOD. Off the record.

(Discussion off the record.)

Mr. FLOOD. That is all.

Mr. RILEY. You may proceed, Colonel.

CAMP O'DONNELL, PHILIPPINE ISLANDS

Colonel SHULER. The next station is Camp O'Donnell, in the Philippine Islands.

GENERATING PLANT

The item we are requesting at Camp O'Donnell is a generating plant, $832,000. This project is required to permit the Army to fulfill its responsibility, assigned by United States Joint Chiefs of Staff agreement of July 20, 1954, for all existing off-island Army and Air Force point-to-point communication circuits. The project will provide primary power for consolidated Army (ACAN) and Air Force transmitters at Camp O'Donnell. The present power (Air Force) consists of four 300-kilowatt units, one completely unserviceable and one serviceable only part of the time. The present building is a temporary corrugated metal shed with open front on a 32- by 70-foot concrete slab. No commercial power is available.

Schofield Barracks, Hawaii

The next station is Schofield Barracks, Hawaii, where 3 items are requested, a commissary, $645,000; a service club, $640,000; and a cold-storage warehouse, $1,877,000.

As the committee knows, there has been a division stationed at Schofield Barracks since the past 8 or 9 months.

COMMISSARY

The first item is a commissary which would replace the old commissary, which is inadequate, due to the redeployment of an Infantry division to this command. The proposed facility is required to replace the present commissary occupying two 40- by 156-foot converted wood frame warehouses (6,240 square feet each) built in 1920. Separate buildings do not permit efficient operation. The present commissary uses portable type refrigeration and is located in the warehouse area. The proposed location of this new facility requires expansion of utility lines, expansion of electric lines to support increased demand, and patron parking area. Upon completion of the new commissary, the equipment in the present facility will be removed and the structures will revert to warehouses.

SERVICE CLUB

The next item is a service club. This project is required to provide wholesome recreation for enlisted personnel who will occupy troop housing at the opposite end of this installation from the existing club. Recreational facilities at Schofield and Wahiawa are limited and those available in Honolulu are generally too expensive for the average enlisted man. The present service club (24,390 square feet) occupies a wood frame corrugated metal building constructed in 1914 as a laundry and converted by enlisted personnel in 1952. The distance between limits of troop housing is over 2 miles; therefore, the existing facility will be retained to serve personnel in the area of its location.

COLD STORAGE WAREHOUSE

Mr. Riley. I notice you have quite an extensive cold storage facility here. Is that necessary because there is not anything else that can be used in the area at all?

Colonel Shuler. That is right, sir. The need for the proposed facility is based on a Department of the Army survey of all refrigeration facilities, civilian and Armed Forces, on Oahu and redeployment of an Infantry division to this command. The facility will serve both Army and Air Force personnel and their dependents at Schofield, Tripler Army Hospital, Hickam Air Force Base, and retired military personnel residing on the island.

I would like to again describe the existing cold-storage structure and show why we need this to replace it. The existing cold-storage warehouse, located at East Range, is a World War II 78-foot by 384-foot T/O-type structure with cane-fiber boards, used as insulation, which have failed and fallen in many of the rooms and, although tem-

porary repairs amounting to $30,000 in the past year have been made to permit continued operation, the maximum life expectancy is 2 or 3 additional years. Refrigerated equipment, now located in 9 separate lean-to's in rear of the structure, will be salvaged. The existing warehouse will be disposed of in accordance with our proper procedures. The proposed site of the new facility requires access and maneauver areas for loading and unloading, expansion of utility lines and enlarging electric lines to handle the increased demand.

In short, sir, this item is to replace an old broken-down refrigeration plant and because the division is there now we very greatly need this facility.

HELEMANO RADIO RECEIVING STATION, HAWAII

The next station is the Helemano Radio Receiving Station in the Territory of Hawaii, where we are requesting 32 noncommissioned officers family quarters, $714,000.

There are no family quarters at Helemano. Military families must be housed in civilian communities or at Schofield Barracks, which, based on permanent peacetime strength, has a deficiency of approximately 2,700 quarters. Few rental units are available in Wahiawa (5 miles distant) and Honolulu (24 miles away). Also there is no public transportation and personnel must commute in privately owned vehicles. Due to its isolation and lack of civilian demand, Helemano is not considered a suitable site for title VIII or title IX housing. This station is the permanent hub of communications for entire Pacific and Far East areas and operates 24 hours a day. During emergencies, off-post personnel are not immediately available because of transportation difficulties.

WAIAWA (WAIPIO) RADIO TRANSMITTING STATION, HAWAII

The next station is Waiawa (Waipio) radio transmitting station, Hawaii. This is the radio transmitting station in the Army command and administrative network located 17 miles northwest of Honolulu.

We are asking at this station for a post exchange and craft shop, $35,000; a fire station, $41,000; 12 NCO family quarters, $256,000; and family quarters (FO) $31,000.

POST EXCHANGE AND CRAFT SHOP

A post exchange and craft shop is required because this station is isolated and no community or recreational facilities are available to military personnel except makeshift or improvised facilities. Exchange items are sold in a room of a temporary building. The nearest theater is at Schofield Barracks, 12 miles away. Motion pictures are shown in the dayroom. The proposed exchange will permit the handling of a greater variety of required nonissue items and the craft shop will serve as a recreational facility providing diversion for enlisted men during off-duty hours.

FIRE STATION

The proposed fire station is required to house one fire truck and provide facilities for fire fighters. Except for thirty-five 5-gallon

water tanks and brush swatters, there is no fire protection at this isolated station. In case of fire, it is necessary that pumpers be dispatched from Schofield Barracks (12 miles away) or a naval installation (7 miles distant). In addition to the distance involved, delay in arrival of fire fighting apparatus is encountered, especially during wet weather, due to the 3.3 miles of poor unsurfaced access road.

FAMILY HOUSING

In addition we are requesting 12 sets of noncommissioned officers' family quarters and 1 field officer family quarters.

There are no family quarters available at Waiawa. Military families must be housed in civilian communities or at Schofield Barracks which, based on its permanent strength, has a deficiency of approximately 2,700 quarters. Few rental units are available in Waiawa (12 miles distant) and Honolulu (17 miles away) and there is no public transportation to the station, personnel must commute in privately owned vehicles. Due to its isolation and lack of civilian demand, Waiawa is not considered a suitable site for title VIII or title IX housing. This station is the permanent hub of communications for entire Pacific and Far East areas and operates 24 hours a day. During emergencies, off-post personnel are not immediately available because of transportation difficulties.

These projects will be constructed on the Government-owned property of 180.49 acres in the vicinity of the radio transmitting station. The quarters are for people who must live near the station because of the 24-hour-a-day operating schedule.

FORT CLAYTON, CANAL ZONE

The next station is Fort Clayton in the Canal Zone, where we are asking $2,350,000 for 106 family quarters for noncommissioned officers. The primary reason why we are quite anxious to get these family quarters for the noncommissioned officers is that we would like to get concurrent dependent travel for as many noncommissioned officers as we can. Now it is 8 to 15 months before a noncommissioned officer can bring his family there because of the housing situation. We do not have that situation as to the commissioned officers, but we do for the noncommissioned officers.

This family housing is required for assigned enlisted men and the overflow of personnel assigned to Fort Amador, Quarry Heights, and Corozol where limitation on space precludes sufficient expansion of housing facilities to accommodate total requirements. Presently the housing situation requires authorized enlisted personnel to obtain substandard housing or pay high rents ($150 or more per month) in the Republic of Panama, 5 to 15 miles from posts, or wait out the long assignment delay period for Government quarters (8 to 10 months for 2 bedrooms; 12 to 15 months for 3 bedrooms) with consequent lowering of morale.

KEFLAVIK AIRPORT (ARMY), ICELAND

The next station is Keflavik Airport (Army), Iceland. We are asking $3,502,000 at this particular station for 88 sets of family quar-

ters and $291,000 for an auditorium with classrooms and training facilities.

I would like to state that this station has a classified mission but the Army mission is the physical guarding of the station.

AUDITORIUM WITH CLASSROOMS

The auditorium with classrooms is required to provide indoor classroom training for Army troops; currently, indoor training is accomplished in small groups (10–20 men), utilizing administrative space and dayrooms which do not permit proper use of training aids and equipment and cannot accommodate classes of sufficient size to permit accomplishment of training programs. During winter months, the need for classrooms is greatly increased and cannot be met by existing facilities.

TRAINING FACILITIES

Training facilities are required to satisfy weapons qualification requirements of the command. Rifle range will be used primarily by the Army but, in certain instances, by troops of all services for qualification purposes. Range house is required for target storage and range administration space. The artillery observation post is necessary for proper training and evaluation of practice artillery firing. The present 30-point rifle range has earth mound revetment and fixed target frames; the proposed range will be sited on the existing range, making maximum use of the already accomplished site preparation. No range house or artillery observation post now exists.

FAMILY HOUSING

Mr. RILEY. Where are these people who are up there now living?

Colonel SHULER. The families are not there. We would like to build quarters that would allow them to go there.

ARMY SECURITY AGENCY—OVERSEAS

Colonel SHULER. We now come to the portion of the book starting on page 559 which concerns the Army Security Agency overseas. You will notice that we list these locations by number. We can give this committee the physical location of each of these numbers. These are the facilities to allow us to house and support the troops that must be in these locations in accordance with the Army Security Agency mission. In one location only we are asking for family-housing authorization but not funding for it, and there are two locations in which we are requesting family housing and funding for the family housing.

Mr. MILLER. Off the record.

(Discussion off the record.)

Colonel SHULER. Mr. Miller, we will prepare a statement giving the details that are not classified and insert it in the record, and in addition Colonel Feindel, Assistant Chief of Staff, G–4, is here to answer any questions off the record that the committee might have.

Mr. RILEY. The total amount requested for these stations is what?

Colonel SHULER. $16,284,000 plus the family housing, which adds up to $5,799,000, so the total requested for funding is $22,083,000.

Mr. FOSTER. I think the record should show that the committee will have on file detailed line item justifications of the projects, because the projects themselves are not classified.

Mr. MILLER. It is their location that is classified?

Colonel SHULER. And the mission.

Mr. MILLER. And the rest is all available?

Mr. RILEY. It is available to the committee but not for the record.

Mr. MILLER. It is only the locations and the purpose for which they are used that are classified?

Colonel SHULER. That is right. I think we can give the committee sufficient data for the record to justify the request.

Mr. RILEY. All right.

(The following information was submitted for the record:)

The Army Security Agency portion of the fiscal year 1956 MCA program will provide essential facilities at existing and planned new installations in 10 separate locations worldwide. These facilities are necessary to meet an operational requirement imposed by a Joint Chiefs of Staff directive. The missions and geographical location of these 10 stations are considered classified military information and must be safeguarded as such. The specific installation missions, however, are in accordance with the normally assigned mission of the Army Security Agency in support of the National Security Agency and Department of the Army.

The detailed justification for each project is contained in the individual construction project justificaion data (ENG form 68c).

In planning the line items included in the fiscal year 1956 MCA program, maximum consideration was given to the use of existing facilities. Only the minimum required to perform the mission at each station is included in the programed constructon. Modified emergency type construction is planned for all new projects (except Hawaii and the Philippines where permanent construction is planned); rehabilitation is to be accomplished on an austere and essential basis; and in both cases local materials and labor will be utilized to the maximum extent possible under existing conditions and within the limitations of the local economy. Cost estimates for line items in the program were based on actual conditions at the site; the estimates have been concurred in by the Office of the Chief of Engineers.

It is imperative that approval be obtained for construction as programed in order for the Army Security Agency to meet the requirements placed on it by the Joint Chiefs of Staff, and in execution of the Agency's assigned mission.

Colonel SCHULER. That leaves three items, tactical facilities, $160,500,000; advance planning, $9,200,000; and emergency construction, $3 million.

TACTICAL FACILITIES

I would like at this time to address myself to the first item, which is tactical facilities, $160,000, page 679 of the large book. I would like to put a statement in the record which I have prepared in the clear. This is a semiclassified subject. With your permission I would like to read this statement because I would like to have the committee have the benefit of it.

(The requested information follows:)

STATEMENT ON FISCAL YEAR 1956 MCA TACTICAL FACILITIES PROGRAM

As part of its fiscal year 1956 public works program, the Department of the Army is requesting authorization and funds totaling $160,500,000 for antiaircraft tactical facilities both in CONUS and overseas and areas. The purpose of this statement is to provide the committee with unclassified information in support of this request.

CONUS

In CONUS the total present Army antiaircraft program provides for a combination of Nike, gun and skysweeper battalions. Two-thirds of the battalions (including 100 percent of Nike) are to be manner by the Regular Army. The remaining one-third will be National Guard battalions not in active service, with equipment only in place on-site.

In the initial phase of the program, started in 1951, Regular Army gun and skysweeper battalions were deployed on site. Since that time the Army has added Nike battalions to the defense. Some of the Nike battalions are formed by conversion of gun battalions and others by activation of new units.

Generally speaking, National Guard units are to occupy gun sites vacated by Regular Army gun units as they are converted to Nike. The National Guard units will have their equipment placed on site with a small civilian detachment (who are members of the unit) to maintain the equipment. The remainder of the battery will report to the site from their homes or businesses upon receiving an alert.

At the present time, most of the Regular Army gun and skysweeper units are on site. Approximately 40 percent of the programed Nike battalions are on site. Approximately 25 percent of the programed National Guard gun battalions have taken over sites vacated by Regular Army units.

The initial authorization of $50 million for antiaircraft tactical facilities constructon program is contained in Public Law 910 of 81st Congress (fiscal year 1951). Additional authorization is contained in Public Law 209, 83d Congress (fiscal year 1954) ($69,108,000); and in Public Law 534, 83d Congress (fiscal year 1955) ($85 million), bringing the total authorization received to date to $204,108,000. Appropriations totaling $50 million for this program are contained in Public Law 911, 81st Congress, Public Law 254, 82d Congress, and Public Law 547, 82d Congress. Under provisions of Public Law 207 and Public Law 663, 83d Congress, the Army has allocated an additional $154,108,000 of prior year appropriations for this program, bringing total funds to $204,108,000 to match available authorization.

The fiscal year 1956 authorization request includes an additional increment of the antiaircraft tactical facilities program in CONUS. This authorization will be used for construction of facilities for additional Nike battalions, for the remaining Regular Army gun and skysweeper battalions and for construction of sites to be occupied by the National Guard in cases where facilities cannot be provided by transfer from Regular Army units.

The Nike program makes up approximately 90 percent of the CONUS consruction in the fiscal year 1956 request. Each Nike battalion will have a headquarters and headquarters battery and four firing batteries. Each firing battery requires a control area and a launcher area. The control area is where the radars and computers are located and requires approximately 8 acres of land. The area between the control area and launcher area is required for line of site and to lay cables. We attempt to obtain easement only over the line of site area. The launcher area requires 43 acres—10 for equipment and 33 for safety area for protection of the public in case of accidental explosion. The launcher area consists of 3 underground magazines with 4 launchers each. The launcher site also has a missile assembly and test building, and a missile-fueling area. Troop housing, messhall and troop-support facilities are located at either launcher area, control area, or both, depending on the conditions at each site.

OVERSEAS

In addition to the increment of the program in CONUS which I have just outlined, the fiscal year 1956 Army public works request includes the initial increment of construction of Nike facilities overseas. In fiscal year 1955, the Army obtained $500,000 to start planning of overseas Nike construction.

In the overseas areas, the Nike battalions will be deployed to defend vital United States military installations. In general, the facilities constructed overseas will be similar to those being built in CONUS. The Department of the Army will ask for an additional increment of the overseas Nike construction program in fiscal year 1957 public-works program.

PRIORITY

In carrying out antiaircraft tactical facilities construction program, the Army will give first priority to construction of facilities in the CONUS. The Depart-

ment of the Army plans to use remaining available authorization and funds for the overseas program.

As pointed out by the Secretary of the Army in his opening statement, the antiaircraft facilities program is of utmost urgency. As of May 1, 1955, the Department of the Army had committed approximately $180 million of the $204,108,000 avilable for this program. The remaining $24 million is scheduled for commitment by August 1955. In order to maintain deployment schedules, it is essential that all of the $160,500,000 for construction in the fiscal year 1956 request be approved. Training and equipping Nike battalions are phased so as to require this construction in fiscal year 1956.

Family Housing for Nike Program

Colonel SHULER. I would like to present our request for family housing for the Nike program. It is at page 74 of the Family Housing book.

We have had presented to us in the Army Staff the firm requirement of the Antiaircraft Command for their family housing as concerns these Nike sites.

We have a pretty difficult problem in holding men at these sites, because the duty is equivalent to a 24-hour, 7-day week alert. Therefore, these men are going through a very exacting period.

Mr. FLOOD. May I inquire, are you having difficulty holding soldiers on a post of duty?

Colonel SHULER. No; that is not what I meant to say. I am saying we have difficulty holding a qualified man on this site, because we do not have many facilities for them to live in and for recreation. There is no place for them to bring their families.

Mr. FLOOD. What you mean is that you are afraid they will not reenlist, but there is no problem holding them as long as they are in service?

Colonel SHULER. There is a requirement for 9,561 sets of family quarters. We do not have any. We want to fund 300 sets authorized last year, and an additional 610 new authorization, making a total of 910.

Mr. FLOOD. We are, unfortunately, I am advised, running into difficulty, nationwide, when we go out to acquire these Nike sites, because of the acreage necessary for the operation of these mechanisms.

Will this housing program necessitate the acquisiton of additional real estate in the same areas, or have you already anticipated that in your original acquisitions?

Colonel SHULER. That is the unfortunate situation. We are either going to have to acquire some additional real estate, or squeeze these family housing units on the site. We have safety rules to follow.

Mr. FLOOD. As you explained to us on the original acquisition problem, because of the nature and requirements of Nike operations you said certain clearances by yards and hundreds of yards were required. It seems to me you cannot possibly squeeze the housing in the original acquisition.

Colonel SHULER. If we could get a waiver of the safety rules in some instances we may be able to squeeze some of this on the area we have. That gets me to the third proposition. Off the record, please.

(Discussion off the record.)

Colonel SHULER. Mr. Chairman, I will insert in the record at this point the strengths and other statistical data requested by the committee in the off-the-record discussion.

(The information requested is as follows:)

AAA tactical facilities, family housing requirements based on average typical sites

	Strength (static)			Housing		
	Officers	Enlisted men	Total	Officers	Noncommissioned officers	Total
Antiaircraft headquarters	75	61	136	67	12	79
Antiaircraft regional	10	20	30	9	4	13
Antiaircraft brigade	16	58	74	14	11	25
Antiaircraft group	15	57	72	13	14	27
Gun (90-millimeter):						
Firing battery (4 each)	5	101	106	5	15	20
Headquarters and headquarters battery	14	89	103	12	17	29
Total battalion	34	493	527	32	77	109
Nike:						
Firing battery (4 each)	8	96	-------	5	15	20
Headquarters and headquarters battery	14	73	-------	11	16	27
Total battalion	46	457	-------	31	76	107
Sky (75-millimeter), augmented battalion	27	335	362	24	88	112

FRIDAY, JULY 1, 1955.

Mr. SIKES. The committee will please be in order.

You may resume, Colonel Shuler.

REAL ESTATE FOR NIKE

Colonel SHULER. Mr. Chairman, we had considerable discussion yesterday afternoon on the Nike request. I feel there is one matter left in that category which I have not covered as yet, that has to do with the question you raised during the hearing before the full subcommittee on the real estate for Nike.

I have here a one-page statement that is classified "secret." I can read it, Mr. Chairman, but I would like to offer it to the committee for its retention and filing in your safe.

Mr. SIKES. The committee will accept it on that basis. It will not be a part of the published record.

Colonel SHULER. Would you care for me to read it to the committee?

Mr. SIKES. I think it would be well for you to read it for the committee's information and furnish for the record whatever you can that is not classified. Off the record.

(Discussion off the record.)

Colonel SHULER. In accordance with your request, Mr. Chairman, I will put in the record as much of this statement as can be unclassified.

Mr. SIKES. Very well.

(The information requested is as follows:)

Land for each battery site for the current Department of the Army program has been selected and detailed surveys of each parcel of land has been made. Land acquisition projects for all battery site projects have been approved by the Armed Services Committees under title VI, Public Law 155, 82d Congress, except for 36 battery sites in 7 target areas which are now pending approval of the Armed Services Committees. The Department of the Army's request for

$2,345,000 in fiscal year 1956 for land acquisition covers these 7 defense area projects.

The Army has a detailed breakdown of location, acreage, method of acquisition, and cost of real-estate projects covering 36 battery sites in the 7 defense areas. The Army also has a detailed real-estate planning report for each of the 7 defense areas covering the 36 battery sites which identifies each parcel of land, its boundaries, and its owners, and other details necessary in evaluating real-estate projects. The Department of the Army's fiscal year 1955 appropriation for antiaircraft defense facilities funds are a lump-sum amount for construction and real-estate acquisition. The very nature of this program did not allow time to present, at the time of authorization and appropriation request, details as to exact site location, method of acquisition, and estimated cost of each site. Therefore, for the past 2 fiscal years construction and real-estate funds were considered to be one fund. As this new program progressed (one with which the Army had little or no experience at the time budget estimates were prepared) the Army discovered that real-estate prices and rate of obligation of real-estate acquisition funds exceeded estimates. As detailed land surveys were completed funds were allotted from the tactical facility funds as required. The preliminary and tentative estimate for land acquisition in the fiscal year 1955 budget was $3,432,000 but after estimates of the second increment of Nike defenses was completed, it was determined that about $2,500,000 additional was required. The Army's fiscal year 1956 program was prepared before it discovered the increased land costs and acceleration in the land acquisition program; and includes funds for acquisition of land in the seven defense areas.

Since the Army cannot determine when the Armed Services Committee will approve the seven defense area projects it has included these projects in the fiscal year 1956 appropriations. If the Armed Services Committees approve these seven projects before the fiscal year 1956 appropriations are made available, the Army will use $2,345,000 of the fiscal year 1955 lump-sum appropriation for this purpose. By doing this the Army will curtail its construction program by that amount and hence must replace these funds with fiscal year 1956 appropriations.

Advance Planning—Emergency Construction

Colonel Shuler. The two remaining items in the fiscal year 1954 Army programs are items of advance planning and emergency construction. Following those, Mr. Chairman, with your permission, we have one section 805 clearance item at Red River Arsenal, and then General Barney and Colonel Symbol, who are presently presenting two emergency projects to the House Armed Services Committee will be here to present those, and that will wind us up.

Mr. Sikes. Very well.

Colonel Shuler. Taking up the next two items, advance planning and emergency construction: On advance planning, we are asking for $9,200,000 against a prior authorization of the same amount; and for emergency construction, we are asking for the funding of $3 million against proposed new authorization which we have already defended before the Armed Services Committees in the amount of $10 million.

I will ask Mr. Foster to explain these two items to the committee at this time.

Mr. Foster. Mr. Chairman, the item for advance planning appears on page 682 of the large book, in the amount of $9,200,000.

As I explained before the full subcommittee in response to your questions, there are 5 items under this heading, 4 of which have heretofore been funded under the appropriation "Maintenance and operation." Those are the first four listed on page 682: "Master planning," "Investigations and studies," "Development of standards," and "Mobilization planning."

The fifth item for advance design has always been carried under the "Military construction" appropriation.

I would like to first state the reason for that transfer and then describe briefly the function under each of these headings.

Mr. SIKES. Very well.

Mr. FOSTER. The first four activities have been carried under "Maintenance and operation" for a number of years. Following an action that occurred about 1948, when there was no MCA appropriation, funds were necessary to continue work and the item was budgeted in the "Maintenance and operation" appropriation. It was so funded through fiscal year 1955.

It has now been recognized in the Department of the Army that these functions are so closely alined to construction that it seemed better that they appear in context in this appropriation.

"Master planning" is the "city planning" of military installations. It entails analysis of the assets at the installation and the planned permanent future installation, and a development in orderly detail of the future construction requirements. It is done at all permanent Army installations, and, beginning this past year, is being extended to temporary installations with a mobilization or interim mission.

"Investigations and studies" are functions performed by the Chief of Engineers which lead to more efficient and better construction. They are analogous to applied research. In these studies the Chief of Engineers investigates construction methods, construction materials, unusual techniques. Under this heading the Chief of Engineers performs his function as technical engineering adviser to the entire Department of the Army. Specifically, district engineers who are called upon by the Army or installation commanders to render engineering advice and service will do so and expenses would be paid by this fund.

"Development of standards" applies to standard drawings used throughout the Army Establishment; drawings of barracks, battalion buildings, regimental buildings, and the like, developed with these funds, are issued to the district engineers so as to achieve uniformity. This activity also would include development of outline specifications.

"Mobilization planning" comprises the site planning against mobilization needs for new installations, or the mobilization expansion of existing installations.

The last subheading is "Advance design"; that is the preparation of specific project drawings for the next year or following year construction programs, usually to the preliminary stage. That, as we have previously testified, serves to give us a clear statement of requirements and a reasonably firm estimate of the cost. We do on occasion extend those drawings to the final stage. That is done for projects normally to be advertised in the first quarter of the fiscal year, or for projects on which there is a somewhat complex situation, so that there is no construction time lost in converting preliminary plans into the working stage.

Dispersal of Army Installations

Mr. Sikes. Where, in this program, do you begin to study projects that definitely are designed for future needs as contrasted with advance planning for projects based on temporary standards?

Where in this program, do you begin the study of dispersal planning for camps, posts, post camps, and stations under atomic warfare conditions?

Mr. Foster. Mr. Chairman, if that could be done——

Mr. Sikes. In other words, it is not being done?

Mr. Foster. It has not yet been started.

Mr. Sikes. Do you not think it is about time it was started? From all we get by reading the papers, this is an atomic age. You are developing, in your advance planning, along the lines of many years of past experience.

Colonel Shuler. Mr. Chairman, may I reply to your question at this time?

Mr. Sikes. Yes.

Colonel Shuler. I have prepared a position on the question you have raised, sir, the same question that was raised before the full subcommittee.

Mr. Sikes. Yes, I have raised it for several years, but nobody has paid much attention apparently.

Colonel Shuler. This is classified as secret. I would like to get this across to you sir, as the basis for the master planning. I can read it, Mr. Chairman, or I can file it with the committee. I did not intend to use this unless I was asked; now, I have been asked and I can read it or file it with you.

Mr. Sikes. What is so secret about preparing for atomic warfare because if we have a war it is going to be atomic warfare.

Colonel Shuler. May I answer that first off the record?

(Off the record discussion.)

Mr. Sikes. How long is the statement?

Colonel Shuler. It is 3 pages. It will take me just a few minutes to read it.

Mr. Sikes. I would like to hear it.

(Off the record discussion.)

Colonel Shuler. In accordance with your request during the discussion off the record, I will insert in the record an unclassified version of the statement I just read and I will file the complete statement with the clerk.

(The information requested is as follows:)

In response to your question regarding the dispersal of Army installations, particularly as it relates to the military construction program, the Army believes that it is essential that a definition of dispersal be agreed so that a clear understanding of the Army position may be reached. Dispersal of a large military installation such as Fort Lewis, Wash., could mean the physical rearrangement of that installation so that there are numbers of small subinstallations spread over a radius of 20 or 30 miles yet comprising one Army installation. This was the system used by the British for their installations in England during World War II. A second and alternative definition of dispersal would be the complete disassociation of these small installations from the parent installation. This would, in effect, create a large number of small posts. Under this second definition, of course, there would be the removal from known target areas of all military installations. The destructiveness of modern weapons is such that dispersal under

the first definition would not answer the passive defense problem and, therefore, in this statement we will define dispersal according to the second definition.

The appropriation request before the committee today contains no funds specifically for dispersal of Army installations.

There are now in the continental United States a limited number of military installations where permanent strengths in excess of 10,000 military personnel are contemplated. These large installations are the ones to which this present question of dispersal relates particularly with respect to the military construction program.

The Army has given careful consideration to the advantages and disadvantages of dispersal for these installations. There are certain basic reasons why we will not recommend their dispersal.

(*a*) First and foremost the Army has, in addition to any passive defense mission, a primary mission of combat readiness. Modern combat doctrine makes it essential that large tactical units, regiments, and divisions, be given intensive training as units. It seems obvious that this could not be done if these units were broken up and permanently stationed in small installations separated by many miles. To forfeit our combat training programs for reasons of passivle defense would be to acknowledge defeat before combat begins.

(*b*) The Army now has billions of dollars invested in permanent and temporary construction at these large military installations. The type of dispersal contemplated would render a large portion of this investment useless and it is highly unlikely that any monetary return commensurate with their value could be obtained by the Government. Added to this loss would be the extremely large cost of building the new smaller dispersed installations. A conservative estimate of this cost would be between 1½ and 2½ billion dollars. I do not have an estimate of the increased cost of operation of a large number of small installations but there would have to be certain minimum overhead organizations duplicating at each small installation those functions now performed by similar personnel at the large installations. It seems safe to say that operations costs might be doubled over those required for the large installations in use today.

(*c*) If one of our military installations were threatened, it could be completely evacuated in short order. The combination of clear command authority, disciplined personnel, ample communications, and ready transportation would render quick evacuation possible under circumstances which would prevent the evacuation of a town or city of comparable size.

Mr. FOSTER. I did not know whether your original question, Mr. Chairman, pertained to dispersal, sitewise or to development of protective design for individual buildings.

I intended to go on to say that in our engineering studies and surveys, we have, since immediately following World War II, done intensive design work in protection construction, both aboveground and belowground structures. The Chief of Engineers, I believe, has some of the most highly qualified experts in that field anywhere in the world. That is one of the uses to which this planning money is put.

(Off the record discussion.)

EMERGENCY CONSTRUCTION

Mr. SIKES. Will you take up the next item, Mr. Foster?

Mr. FOSTER. If the committee has no further questions on the item for advance planning, the next item is "Emergency construction" appearing on page 684 of the large volume.

Mr. SIKES. Very well.

Mr. FOSTER. We are requesting an estimated amount of $3 million for the replacements of damage due primarily to acts of God. The committee will note on page 684, a figure of $10 million. That was the authorization requested and pending before the two Houses of the Congress now, and in the upper right-hand corner of that page you will notice the proposed appropriation shown at $3 million. This, of

course, cannot, by its very nature, be supported with specific projects. It is used as the occasion arises.

Mr. SIKES. What has been your experience in this field?

Mr. FOSTER. As regards the amount of money or the number of projects, Mr. Chairman?

Mr. SIKES. I think you might give us information on both.

Mr. FOSTER. Since the fiscal year of 1949, Mr. Chairman, the Army has used $11.5 million in the continental United States and $29 million overseas for emergency construction projects. Those have covered approximately 60 individual line items. They have not all been acts of God types of emergency, but under the authority granted by the Congress some of the funds have been used to take care of unforeseeable requirements which were of such urgency that they could not wait for the next annual appropriation.

Mr. SIKES. For instance, what?

Mr. FOSTER. May I give you one off the record?

Mr. SIKES. Yes.

(Off the record discussion.)

Mr. FOSTER. I might add one illustration for the record: We had a small wooden stave waterline in Panama which ruptured and cut off the water supply for an entire segment of the Canal Zone, and, if my memory is correct, it took about eighty to ninety thousand dollars for that from emergency funds.

Mr. SIKES. Are there no funds from which this type of emergency can be taken care of?

Mr. FOSTER. Under the general provisions of the Military Appropriation Act, under maintenance and operation funds, an amount to the extent of not more than $50,000 may be certified by the Secretary of the Army; or not to exceed $200,000 by the Secretary of Defense. However, the Secretary of Defense has felt that it is more proper to do these things with money from the military public works appropriations.

Mr. SIKES. Do you have figures for the last 2 fiscal years on this?

Mr. FOSTER. I do not have, Mr. Chairman. I have the total figures but I will have to supply that portion for the record.

Mr. SIKES. If you will.

(The information requested follows:)

During the last 2 fiscal years (fiscal year 1954 through third quarter fiscal year 1955) the Army has obligated $9,179,912 of emergency construction funds as follows:

	Continental United States	Overseas	Total
Fiscal year 1954	$1,459,736	$5,445,258	$6,904,994
Fiscal year 1955 (through 3d quarter)	1,642,168	650,750	2,292,918
Total	3,101,904	6,096,000	9,197,912

Mr. SIKES. The total figure was $11 million since 1949?

Mr. FOSTER. In the continental United States, and $29 million overseas, or a total of approximately $40 million.

Mr. SIKES. So that the figure you give us for 1956 is both for continental and overseas, and this would be less than the average for the past several years?

Mr. FOSTER. It would, yes.

Colonel SHULER. Mr. Chairman, that completes our justification of the fiscal-year 1956 Army program.

With your permission, I would like to justify the section 805 clearance project, and then I have the officers here to present these two projects under the "Emergency construction" authorization.

Mr. SIKES. Before we complete the hearings, I would like to bring out 1 or 2 items, and I think this might be as good a time to do that as any.

Colonel SHULER. Very well.

CAMP DESERT ROCK, NEV.

Mr. SIKES. Is there anything in your 1956 budget for Desert Rock?

Colonel SHULER. No, not in this fund.

Mr. SIKES. Is there anything for construction in any funds for Desert Rock for 1956?

Mr. FOSTER. There has been, Mr. Chairman, maintenance and operation funds applied to Camp Desert Rock on about four different occasions, to the total of——

Mr. SIKES. I mean for fiscal year 1956.

Mr. FOSTER. Not in 1956.

Mr. SIKES. Desert Rock is a pretty desolate kind of location?

Colonel SHULER. There are some funds set up for fiscal year 1957 under MCA, but nothing for 1956.

Mr. SIKES. I do not know what the requirements are for Desert Rock from the standpoint of your program, but I do know that the situation there is very poor. As I recall, the water has to be hauled a good many miles, and it appears to me that if the Army is going to continue its use you ought to have developed some plans for improving it.

Will you comment on that, please?

Mr. FOSTER. There have been 1 or 2 points which have prevented us from putting it in this 1956 construction program. It has only been within the last 2 months we have been able to come to any definitive answer on the continuation of use by the Army of Camp Desert Rock.

It has been the subject of quite a bit of correspondence between the commanding general of the Sixth Army and the commanding general of the Continental Army Command, the Deputy Chief of Staff for Logistics, and others, which has been going on for the past 6 to 8 months, concerning the future use of that camp. However, we now feel that we must make preparations for the people who are going to Desert Rock, and we are including in the 1957 program everything, so far, that the Sixth Army has asked us for. With respect to the water situation, there was some 22 miles of water line which was to have been provided in one of the maintenance and operation projects. I think there had been some wells which have been provided.

Mr. SIKES. They have not been up until a few months ago; I was there some 2 months ago.

Colonel SHULER. May I give a statement on this off the record, Mr. Chairman?

Mr. SIKES. I think we should have a statement on the whole subject in the record. It occurs to me that if you are going to stay there, you ought to give some thought to bringing an emergency request in here, at least for putting in a water system with 1956 funds. I would like you to give us a statement on that situation. I am not inclined to encourage the Department to spend money which it does not need but this is a very deplorable situation.

Colonel SHULER. It is just that. I merely wanted to bring out the fact that we have been studying this for at least 6 months. I wanted to be sure that that was in the record. It is just a matter of arriving at a point where we can spend the money to install these various things with a degree of certainty that they will be used in the future.

(The information requested follows:)

1. Camp Desert Rock, Nev., has been used to support Desert Rock exercises conducted concurrently with Atomic Energy Commission tests in Nevada. Army participation has varied from 2,000 to 3,000 personnel, requiring approximately 1,500 supporting personnel. Observers and participating personnel are housed in tents; overhead personnel are normally housed in prefabricated buildings.

2. Existing facilities are of emergency standard and have been provided with maintenance and operation funds. Sizes of projects have been limited to the Secretary of Defense approval authority ($200,000).

3. Department of the Army staff is now reviewing a request from commanding general, Sixth Army, that the following emergency standard facilities be included in the proposed fiscal year 1957 military public works program:

147 enlisted man barracks, 17-man	$494,000
31 enlisted man latrines	197,000
3 enlisted man messes	421,000
95 bachelor officers quarters, 8-man	319,000
26 officer latrines	165,000
2 officer field messes	120,000
Water pipeline and pumping station	462,000
3 fuel storage tanks	15,000
6 administrative buildings	144,000
Dispensary	48,000
2 storehouses	34,000
2 motor repair shops	96,000
Post exchange	66,000
Total	2,581,000

4. Based on known AEC schedules for tests in Nevada, Department of the Army has no requirement at this time for use of fiscal year 1956 emergency construction funds at Camp Desert Rock, Nev.

FORT CARSON, COLO.

Mr. SIKES. I want to be sure that we have the whole story on Fort Carson. I am not at all certain that I have been given sufficient justification. It appears to me that there has been a rather sudden emphasis placed on Camp Carson as a division headquarters. Whose decision was it that you should suddenly give this added emphasis to this particuular post and to spend this considerable amount of money at Fort Carson?

Colonel SHULER. Any decision, no matter how it is described, is the decision of the Secretary of the Army. I do not admit, sir, that it was a sudden decision to lend emphasis to Camp Carson.

Mr. SIKES. When did it become a division headquarters?

Colonel SHULER. It became a permanent division station in January of 1954. However, it was a division station throughout the war——

Mr. SIKES (interposing). Oh, but that is World War II. We have not been talking about that for some time. Was it a division headquarters during post-World War II and prior ot the Korean war?

Colonel SHULER. May I make a statement off the record?

Mr. SIKES. Well, I would like an answer in the record.

Colonel SHULER. For the same reason that many other posts——

Mr. SIKES. Then the answer is "No."

Colonel SHULER. It was not at that time.

Mr. SIKES. When did it become a division headquarters in the post-World War II period? Did it become a division headquarters prior to 1954?

Colonel SHULER. Not a permanent division station; no, sir.

Mr. SIKES. You keep using the word "permanent." What happened before it became a permanent division headquarters?

Colonel SHULER. It was a temporary station, used in conjunction with Camp Hale.

Mr. SIKES. Where was the division headquarters at that time which is now located at Fort Carson?

Colonel SHULER. Camp Atterbury, Ind.

Mr. SIKES. Why was the change made from Atterbury to Carson?

Colonel SHULER. It was made from Atterbury to Carson to put a permanent division at a permanent station in connection with the mountain warfare training that was done at Camp Hale. May I put another comment in the record here showing exactly what happened at Atterbury?

Mr. SIKES. Yes; you can supply that for the record.

(The statement referred to follows:)

Camp Atterbury was activated in 1950 to support the rapid expansion of the Army brought about by the action in Korea. The cessation of hostilities in Korea and the reduction in the size of the Army required the inactivation of Camp Atterbury, Ind. The 31st Infantry Division which was stationed at Camp Atterbury was transferred to Fort Carson, Colo., a permanent installation. Fort Carson can not only support the training of a division in conventional warfare but is also capable of supporting the training of a division in mountain and winter warfare. The inactivation of Camp Atterbury permitted the Army to consolidate activities on a permanent post and also reduced annual operating costs.

Mr. SIKES. Has the mountain training activities at any time prior to 1954 been given a division status, a division headquarters?

Colonel SHULER. Yes; during World War II. And I do not know about Korea.

Mr. SIKES. How many divisions did we have during World War II?

Mr. FOSTER. A grand total of 80.

Mr. SIKES. How many do we have now?

Colonel SHULER. Sixteen or seventeen.

Mr. SIKES. So you cannot exactly tie this situation to the division situation we had in World War II.

Colonel SHULER. May I make one other statement?

Mr. SIKES. Yes, certainly.

Colonel SHULER. I would say, sir, that there is an absolute need for a permanent division station in conjunction with mountain warfare training. Camp Hale is our one and only mountain warfare training area in the United States. That was the reason, sir, the main reason, why Camp Carson was placed in the permanent Army structure as a permanent station.

Mr. SIKES. Is Camp Carson the only station that serves Camp Hale?

Colonel SHULER. Yes.

Mr. SIKES. Has it always been the only station that served Camp Hale?

Colonel SHULER. Except possibly during World War II. There may have been the direct movement of troops up there for the training from other stations, but Carson is the basic station from which the troops move up and train at Camp Hale, 100 miles up in the mountains.

Mr. SIKES. When Carson was selected as the division headquarters was consideration given to overcrowding in the area from Air Force installation activities?

Colonel SHULER. At the time we selected it, sir, the location of the Air Academy had not been established. So far as the other air installations in that section are concerned; yes.

Mr. SIKES. It would not render any permanent harm to the training program if this construction activity were postponed until it could be determined more clearly what the situation is going to be in Colorado, in the Fort Carson area—from the standpoint of water supply, the effect on the civilian facilities, and overcrowding due to the Air Force installation there?

Colonel SHULER. Yes, it would for this reason: There are about 28,000 people stationed there now with no permanent construction. The barracks they are in are below the standard of any average big permanent post in the Army structure.

Mr. SIKES. How many of those 28,000 people will be permanently housed 1 year from now as the result of this program?

Colonel SHULER. We have under construction out there now, sir, six permanent barracks.

Mr. SIKES. What is going to be the total cost at Fort Carson?

Colonel SHULER. I have that information also.

Mr. SIKES. Well, out of the total you have before us, the money that you are requesting as of this date, were any of the installations to be provided by this budget estimate to be in operation 12 months from now?

Colonel SHULER. No; it will take a little longer than that.

Mr. SIKES. Then the answer to my question would be that none of the 28,000 would be permanently housed from this budget? Is that correct?

Colonel SHULER. That is correct.

Mr. SIKES. Now, I want you to tell me what the total cost of Camp Carson is going to be under the program as it is now anticipated.

Colonel SHULER. The total cost to give Fort Carson permanent construction for the permanent strength, of every type of required facility, would be approximately $200 million, spread over an indefinite period of time.

Mr. SIKES. How much of that has been funded thus far?

Colonel SHULER. $4.8 million.

Mr. SIKES. The total funded thus far is $4.8 million?

Colonel SHULER. Yes.

Mr. SIKES. And this year's request is how much?

Colonel SHULER. $7,487,000 for facilities other than family housing, and $13,324,000 for funding of existing authorizations for last year's housing.

Mr. SIKES. Thus far, there has been a bite of about $5 million out of the $200 million, and there is another bite of about $21 million programed for the fiscal year 1956, making a total of about $25 million out of a possible $200 million; is that right?

Colonel SHULER. That is correct, sir. May I add an additional statement?

Mr. SIKES. Of course.

Colonel SHULER. On any installation where we are behind, in considering all of the installations and all areas, we do add larger increments to try to catch up, and that is the case at Camp Carson.

Mr. SIKES. Now, would you show me on the map the location of Camp Carson and point out the other Army installations of a similar nature. In other words, take 2 or 3 stations within the same general area.

Colonel SHULER. Here is Camp Carson.

Mr. SIKES. All right; where are some of the other installations in the general area?

Mr. FOSTER. Air Force?

Mr. SIKES. No, I mean in the general area, camps.

Colonel SHULER. Camp Hale is 100 miles up in the mountains from Carson.

Colonel MALEVICH. In Denver we have the Rocky Mountain Arsenal.

Mr. FOSTER. I think the chairman is talking about large troop stations, not depots.

Mr. SIKES. Yes.

Mr. FOSTER. The closest one, Mr. Chairman, offhand, would be Fort Bliss, Tex., several hundred miles to the south; and Fort Sill, Okla.; and Fort Riley, Kans. That is the range of approximately this amount [indicating] regarding the large class I installations.

Mr. MILLER. The way you have pointed them out on the map, they seem to be approximately the same distance from the Colorado station.

Mr. FOSTER. Yes, they are.

Mr. SIKES. Where is Camp Hale?

Mr. FOSTER. Camp Hale is up in the mountains, about 100 miles northwest of Fort Carson.

Mr. FORD. Where is the Air Force Academy with reference to Camp Carson?

Mr. FOSTER. It is 8 miles north of Colorado Springs and Fort Carson is 8 miles south; about 16 miles apart.

Mr. SIKES. The Continental Air Command——

Mr. FOSTER. That is right in the city.

Colonel SHULER. Right in the city of Colorado Springs.

May I make one further statement, Mr. Chairman?

Mr. SIKES. Yes.

WATER SUPPLY

Colonel SHULER. We discussed at some length yesterday—and we were asked to furnish for the record a photostatic copy of the studies regarding the water situation to which reference has been made this morning, and that is being put in the record. And I reiterate that those studies were made by a competent engineering firm to show that

there is not only enough water for the present strength and installations in the Colorado Springs area, but that there are plans being carried out now that will take care of any possible future increase in that area, except for two stipulations, which I must make:

(NOTE.—The studies referred to appear on p. 180.)

1. The Army has no intent to increase its strength at Camp Carson and, therefore, it does not admit to increasing the strength in that area.

2. We cannot predict the increase in population at Colorado Springs in the future. But we are assured by that city, by the engineering department of that city, that the water supply, water situation, is well in hand.

Mr. SIKES. What is the present source of water?

Colonel SHULER. Mr. Zackrison, do you have an answer to the question regarding the present source of water supply for the various installations? I do know that when we acquired Fort Carson we acquired water rights, and at one time were actually selling water from these water rights we have at Fort Carson. I would like to ask Mr. Zackrison to supply you with further information.

Mr. ZACKRISON. This report I have here indicates the production of water from the Pikes Peak watershed is presently 5,443 million gallons. Available from Blue River, present facilities, 1,430 million gallons.

Available from Blue River, additional amount, from additional pumps now installed, 715 million gallons.

Available from Blue River, upon the recent completion of pipelines an additional 715 million gallons.

Available from Blue River, upon the completion of McCullough Creek diversion facilities, June 1956, 1,300 million gallons.

Available from Blue River, upon the completion of the diversion, 1,430 million gallons.

Mr. SIKES. Will you put that statement in the record, and show also in your answer their requirements? Because you realize, unless you can tell us what the demand is, we cannot very well relate what that is to the supply.

Mr. ZACKRISON. The demand is 6,555 million gallons annually.

Mr. SIKES. Will you just put that complete statement in the record?

Mr. ZACKRISON. Yes.

(NOTE.—The information appears on p. 180.)

Mr. MILLER. Just while you are on that, the 6 billion-plus requirement contemplates what?

Mr. ZACKRISON. Contemplates requirements against the use by the Air Academy which is approximately a billion; and the demand based upon the 1955 use of some 5 billion, with other estimated increases of some 412 million gallons.

Mr. SIKES. This is for all the requirements in the area?

Mr. ZACKRISON. That is correct.

Mr. SIKES. For the city and all?

Mr. ZACKRISON. Yes.

Mr. SIKES. How large is the city at this time?

Mr. FOSTER. About 50,000.

Mr. SIKES. At the moment, you have a very healthy margin; you have almost twice as much water as your present annual requirements.

Is the troop strength, considering all 3 military installations in the area, to increase beyond this 1953 figure I have been furnished?

What is the comparable troop strength; is it going to increase at these three installations?

Colonel SHULER. So far as the Army is concerned, no. I cannot answer for the Air Force or any other installations.

Mr. SIKES. Has there been any coordination between the different branches of the service?

Colonel SHULER. Oh, yes.

Mr. SIKES. You are not just taking each other's water?

Colonel SHULER. No; this is a coordinated study.

Mr. ZACKRISON. This is a study that was made for all groups.

Mr. SIKES. This figure for 1953 disturbs me somewhat.

Mr. ZACKRISON. This was, at that time, to meet the demands.

Mr. SIKES. I would like to be sure, and you can put this in the record, that the figures which you are giving us are current figures.

Mr. ZACKRISON. Yes.

Mr. SIKES. Because I find some difficulty in balancing the 1953 figures on use from the city water system with the 1955 and 1956 anticipated demand from troop strength, which obviously has been increased since that time, and which I think is going to grow rapidly.

(The information requested is as follows:)

The 6.5 billion gallon annual water requirement is stated on page 4 of the letter of June 12, 1954, from the city of Colorado Springs to the Secretary of the Air Force; a copy of this letter is attached to page 483 of this transcript. The 6.5 billion-gallon requirement includes the water needs of the planned Air Force Academy and following existing Army and Air Force installations with current military strengths as indicated:

Army (Mar. 30, 1955):	
Camp Carson	21,559
Ent Air Force Base	110
Air Force (Mar. 30, 1955):	
Peterson Field (temporary Air Force Academy)	249
Ent Air Force Base	1,947
	23,865

Mr. ZACKRISON. May I add this further statement?

Mr. SIKES. Yes.

Mr. ZACKRISON. I have a letter here dated January 27, 1955, from that municipality to the Secretary of the Air Force, making reference to the letter transmitting this document, stating that they believe their letter of June 12, 1954 constitutes a full and accurate estimate of the municipal water system of the city of Colorado Springs from Pikes Peak region and the Blue River watershed.

Mr. SIKES. Just put that letter in the record if you will.

(The letter referred to appears on p. 181.)

Mr. SIKES. Now, let me ask you this question. The total use of the watershed for the year 1953 was 5 billion gallons. Does that include the requirements at Fort Carson?

Colonel SHULER. Yes, that required in addition to the water we already have, to the water rights we have on the post.

Mr. SIKES. The figures you show for Fort Carson, the post uses the city water supply of 5 billion gallons, and the Air Force 1 billion. There is an estimated increase in the needs of 400 million gallons; but you have got sources of water of 11.3 billion gallons. I want to be

sure that Fort Carson is included in this 6 billion requirement—6.5 billion requirement, or that you know what Fort Carson is going to get.

Colonel SHULER. We will add that information to the statement.

Mr. RILEY. As I understand it, some of this water comes from the river. I would like also to have included in your statement the minimum flow, the lowest of record.

Mr. ZACKRISON. From Blue River?

Mr. RILEY. Or any other source.

(The information requested follows:)

Minimum flows of record are not available for the streams in question. Stream row studies by Black and Veatch for city of Colorado Springs are based on snowpack studies.

The following data was obtained in telephone conversation July 5, 1955, with Mr. J. S. Nichols, superintendent, water division, city of Colorado Springs.

ANNUAL REQUIREMENTS

	Present	5 years hence
	Acre-feet	*Acre-feet*
Colorado Springs and suburbs	14,400	18,000
Fort Carson (1954)	2,100	[1] 4,200
Peterson Field	100	200
Air Force Academy		3,370
Total	[2] 16,600	[3] 25,700

PRODUCTION (MINIMUM)

Pikes Peak and low levels (minimum year, 1954)	7,950	7,950
Blue River sources [4]	8,600	13,000
Ground water (28 existing wells) at least	3,250	3,250
South Park Ranch (rights)	1,000	1,000
Total	[5] 20,500	[6] 25,200

[1] Estimated.
[2] Equals 5.42 billion gallons.
[3] Equals 8.4 billion gallons.
[4] The indicated production figures from Blue River sources are based on facilities existing or under construction, and are limited by pipe capacity. The city can exercise its rights and increase this production to approximately 18,000 acre-feet by increasing pipeline capacity.
[5] Equals 6.72 billion gallons.
[6] Equals 8.25 billion gallons.

Negotiations are underway for the aquisition of other rights for future development when the need therefor is indicated.

TROOP STRENGTH

Mr. FORD. What was the total troop strength at Camp Carson at its peak during World War II?

Colonel SHULER. The peak during World War II was 41,000 enlisted men. I cannot give you at this time the civilian or officers but there were 41,000 enlisted men.

Mr. FORD. The normal ratio would be about 1 to 10?

Colonel SHULER. There would be about one-tenth, about 4,000 officers, which would make about 45,000, and I do not believe that the families were there at that time——

Mr. FORD. You would have about 45,000?

Colonel SHULER. Well you might say 46,000 to cover what the peak would be.

Mr. FORD. During the peak of World War II, I would imagine you would have had more in the area than at any time under peacetime

circumstances, from the Air Academy, Camp Carson, and the civilian population.

Colonel SHULER. I must bring out, Mr. Chairman, that under peacetime conditions, the wives and children of all the people stationed there would be with them, and I think that that, plus the civilian workers, would run it up to about 40,000.

Mr. FORD. Did you have a water shortage there during the peak of World War II?

Mr. FOSTER. There was no water shortage.

Mr. RILEY. Mr. Miller?

Mr. MILLER. I have no further questions, but I would like to have in the record, I would like to have you submit to the committee, off the record, a table of organizations so far as the strength, officers and enlisted men, is concerned, in the NIKE units.

Colonel SHULER. Yes. We are getting that up for the committee.

Mr. MILLER. And the same thing for the standard type of gun battalion batteries.

Colonel SHULER. Yes; that will all be supplied to the committee as a part of yesterday's record.

Mr. MILLER. You also have your estimated figures showing the command along with the dependency load?

Colonel SHULER. Yes.

Mr. FORD. Off the record.

Mr. SIKES. Off the record.

(Discussion off the record.)

SAVINGS, FISCAL YEAR 1955 EXECUTION PROGRAM

Mr. SIKES. I have one other thing I want to bring up before we resume the final phases of the hearings. Some reference has been made during the hearings to a savings of $20 million. I think the record should show more clearly what that savings is and how it was possible for it to be generated.

Colonel SHULER. Mr. Chairman, I could give that to you now, but I would prefer to submit a statement listing the savings and telling how we arrived at the savings, if that is all right.

Mr. SIKES. Yes, that will be completely satisfactory.

(The matter referred to is as follows:)

Savings fiscal year 1955 execution program

Okinawa	$4,110,400
Austria	3,154,000
Aberdeen Airfield	1,458,000
Fort Benjamin Harrison (academic building)	1,014,500
Barracks (continental United States)	3,000,000
Fort Hood, ordnance repair facilities	504,000
Fort Bragg, land acquisition	6,628,000
Kings Bay (ammunition outloading terminal)	1,485,000
Total	21,353,900

Mr. SIKES. Is that the $20 million savings that we specified in the previous bill when we gave you the right to set aside $20 million? Is that how this came about?

Colonel SHULER. No, sir; this came about from our getting favorable contracts by bidding competition, and because of a few items

which have been deferred or canceled because the need for them has changed.

Mr. SIKES. Is this $20 million that would revert to the Treasury if we were not to allow you to use it?

Colonel SHULER. Yes. It is from these same savings that I told Mr. Flood I could furnish money for Tobyhanna, sir. I told Mr. Flood yesterday what we were doing, and he is completely satisfied.

Mr. SIKES. But the money that you are requesting for projects against this $20 million savings is not for projects which were put in, I assume, just to seek an additional $20 million. They are part of the overall need?

Colonel SHULER. Yes; they are part of the overall need, and we felt that this committee would desire us to use these savings rather than to ask for additional funds.

Mr. SIKES. Well, the committee, of course, is delighted that you have been able to make savings.

Mr. FOSTER. Could I add a word to that before we leave it, Mr. Sikes?

Mr. SIKES. Of course you may.

Mr. FOSTER. The committee will remember that in the fiscal years 1954 and 1955 the Army did just what we are proposing with this $15 million but on a much larger scale. We reprogramed available unobligated balances for newly authorized work, and the fact that this is only $15 million is representative of the fact that we have dried up this source. This is really the termination of a procedure which was started 2 years ago.

Mr. RILEY. Off the record.

(Discussion off the record.)

Mr. RILEY. Is not this the first time that you have asked for any new money in 3 years?

Mr. FOSTER. Yes, Mr. Riley; this is the first time that the Army had asked for new construction funds since the fiscal year 1953.

Mr. MILLER. Off the record.

(Discussion off the record.)

Mr. SIKES. Off the record.

(Discussion off the record.)

Mr. SIKES. Proceed, Colonel.

Colonel SHULER. Mr. Chairman, that completes our defense of the Army military construction program for this year.

Mr. SIKES. Thank you, gentlemen. Your testimony has been very helpful to the committee.

Colonel SHULER. Thank you, Mr. Chairman and gentlemen of the committee. I wish to express my appreciation. I think the committee has given us a very sympathetic hearing.

Mr. RILEY. I want to add my word of thanks, Colonel Shuler, for the fine job you and your people have done in defending your program. Your presentation has been clear, concise, and well done.

Colonel SHULER. Thank you, sir.

FRIDAY, JULY 1, 1955.

WEST COAST AMMUNITION DEPOT

WITNESS

HON. JOHN F. BALDWIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. SIKES. Mr. Baldwin, the committee is very glad to have you with us. I understand that you have a problem of particular interest to you, which you want to discuss with us, and I assure you that the committee will be very happy to hear you.

Mr. BALDWIN. Thank you, Mr. Chairman.

I have come before you to testify on the west coast ammunition depot, near Fairfield, in Solano County, which is in my congressional district in California.

The proposed appropriation for that project is $12,860,000 and I am here to urge that the committee not appropriate any funds this year for that project, and I would like to state the reasons why.

First of all, the project is definitely not an urgent project. I have a letter here from the Department of the Army, dated April 22, 1955, in which they say:

> The Department of the Army plans no construction at Potrero Hills prior to mobilization day (M–day). The proposal in the year 1956 includes the fee acquisition of approximately 22,000 acres of land and dredging to a depth necessary to accommodate ocean shipping.
>
> The land acquired and the dredging accomplished will remain until mobilization requirements would necessitate construction of wharves, railroads, and other port facilities. This post M–day construction must be authorized and funded by the Congress.

And then the last paragraph contains a statement concerning the time schedule:

> Construction will not be undertaken before M–day. Construction of the complete port after M–day will take approximately 18 months.
>
> I wish to emphasize that there will be no construction on this project prior to M–day and that the date of M–day cannot be predicted by the Army. It may never occur.

I just wanted to bring that out to the committee. This is signed by Brigadier General Hauck, Jr.

Mr. SIKES. Would you like to have the entire letter made a part of the record?

Mr. BALDWIN. I would just like to have the portion which I have quoted in the record.

But I wanted to point that out to indicate—this is confirmed by the Army testimony before the House Armed Services Committee, and the Senate Armed Services Committee—and all they propose to do at this time is to take 22,000 acres of land off the tax rolls and freeze it. They do not propose to do any construction at this time and they say, themselves, they just want to hold it.

Mr. SIKES. What type of land is it?

Mr. BALDWIN. It is land which is a combination of grainland and grazing land and some swampland.

Mr. SIKES. The land, in part, is now being used?

Mr. BALDWIN. That is correct.

Mr. SIKES. And it would remain available on the tax rolls by virtue of the fact that some of it is now valuable land?

Mr. BALDWIN. That is correct. It represents approximately 5 percent of the total land area of Solano County, which already has Travis Air Force Base, Mare Island Navy Yard, and the Benicia Arsenal.

Now, the reason I would like to urge that no appropriation be made this year is that this proposal is very closely tied in with the Navy proposal to expand Port Chicago naval magazine which is 10 miles away, and it is in the same military public works bill as the Navy proposal to authorize the purchase of another 4,500 acres for the Port Chicago naval magazine which the Army has used in the past, for the shipment of munitions.

I went before the House Armed Services Committee and urged that the committee go out and look at these two things, as they are just 10 miles apart, and not act at this time because there are lots of possible considerations that should be looked into; whether one ammunition depot can do the whole job; and if so, where; and whether this is a bad location.

It happens that this is within 10 miles of the Port Chicago naval magazine, within 5 miles of the Travis Air Force Base and within about 10 miles of the Benicia Arsenal, and if a hydrogen bomb were dropped, it could blow up the whole 4 of them.

I would just like to show you a map which indicates where four planes crashed in take-offs from the Travis Air Force Base within the past year.

This map shows the Travis Air Force Base. This is the major runway, in a southwesterly direction. Here is the town of Fairfield, and this is the Travis Air Force Base here. And these red points indicate where four planes crashed over a period of time.

This [indicating] is the proposed ammunition terminal where the Army proposes to load ships, from carloads of ammunition, located in here, with the anchorage in here [indicating].

There are some danger aspects, having a major runway pointing right down into this area, which we feel have not been given full consideration, and we feel that the committee ought to go out there and go into the matter, plus the danger of concentrating additional installations of this type, when we are trying to spread out installations everywhere, to avoid the concentration risks.

Mr. SIKES. What is the distance from Travis over to this proposed installation?

Mr. BALDWIN. The actual outer edge is not more than one and a half miles, from Travis. It may be 4 miles from the runway to the actual loading pier down here [indicating].

I would like to read from the exchange of statements on the House floor last Monday with Chairman Vinson.

This occurs on page 7928 of the Congressional Record of Monday, June 27, and I referred to the House Armed Services Committee and I thanked them for deferring action on the Port Chicago naval magazine, which they had struck from the military public works bill, and then I said:

> There is another proposal in the bill in Solano County, also in my district, the west coast ammunition terminal. It is my understanding, after talking with the chairman and the ranking minority member that, although this proposal

is included in this bill, before final action is taken to acquire the property involved for the west coast ammunition terminal, a subcommittee of this committee will be going to California this fall and the subcommittee will inspect this property proposed to be acquired by the west coast ammunition terminal, the Real Estate Subcommittee of the Armed Services Committee.

I think that is the situation and I ask the chairman if I have made an accurate statement of my understanding.

And the chairman of the committee, Mr. Vinson, stated:

The gentleman from California has made an accurate statement. I may say that in the matter of acquisition of land, as no doubt the members well know, while it may be authorized in this bill, and money may be appropriated, yet before the Government purchases the land, it must again be scrutinized by the Armed Services Committee of the House and the Armed Services Committee of the Senate. So when the subcommittee goes out to look at the situation in regard both to Port Chicago and the west coast ammunition terminal, they will take those two subject matters into consideration and advise the committee, before 1 foot of land is acquired.

Now, I am not asking that the committee necessarily determine whether this is a good or bad project, but obviously it is not an urgent project, and Mr. Vinson has stated clearly in the Congressional Record that he is going to send a subcommittee out to look at both of these projects, and under those circumstances, it seems to me that it would be highly inadvisable to make any appropriation until that study is completed.

And that is what I would like to ask this committee, that it simply not recommend any appropriation of funds this year, but await the subcommittee's going out and looking at these two proposals, on the ground, so they can actually see what properly should be done.

Mr. FORD. How long do you estimate it would take to do the dredging if they should go through with this proposal? I ask that question because——

Mr. SIKES (interposing). They asked for money for dredging in this bill, $9,651,000. Apparently, they would expect to do a substantial part of that during the coming fiscal year.

Mr. BALDWIN. May I say on that, Mr. Chairman, that the Senate Armed Services Committee struck the dredging provision out of the military public works authorization bill; the Senate Armed Services Committee acted yesterday, and the bill before the Senate today, from the Senate Armed Services Committee, has struck the $9 million for dredging out of the bill.

Mr. SIKES. If that were to be agreed on in the conference, there would be nothing before us except the land acquisition of $3,209,000.

Mr. BALDWIN. Yes. And may I read from the Senate report just issued?

Mr. SIKES. Certainly.

Mr. BALDWIN. And this is from page 12 of Senate Report No. 694, on H. R. 6829:

The Army requested an authorization of $12,860,000 to provide an ammunition terminal in the San Francisco Bay area of California. In the same area, the Navy requested $1,688,000 for the acquisition of land at the Naval Magazine, Port Chicago, California, for the purpose of providing additional safety distances and to restrict encroachment on a hazardous area. Both of these acquisitions were opposed by local citizens. The committee inquired into the posibility of combining the ammunition-loading facility in this area, so as to obviate one of the acquisitions. Responsible officials in the Department of Defense insist that a combination is not feasible because the Port Chicago area could not accommodate the expansion that would be required for adding the Army ammunition

loading requirements here, and the area proposed for acquisition by the Army cannot accommodate the types of ships that normally are loaded at Port Chicago. The committee has approved the land acquisition for the West Coast Ammunition Terminal, but has deferred the item of $9,651,000 for dredging. This terminal is a mobilization requirement and the committee is of the opinion that dredging accomplished at this time might have to be repeated in the future. While the land acquisition at Port Chicago has been approved, the committee is seriously disturbed that entire towns, including Port Chicago, will be left within the danger zone. The committee believes that the Department of Defense should restudy the safety problem at Port Chicago and submit to the Congress a program that will comply with the Department's own regulations on safety distances at this location.

Now, the study on this matter has not been completed, and it is my opinion no funds should be appropriated for items of this type, which is not an urgent item, until the matter can be studied.

I asked in the hearing before the Armed Services Committee of the Senate what the Army would do in the intervening 18 months after war broke out. They said it would be 18 months after war started before they could get the facility into operation because they do not plan to make any construction until mobilization day.

They said that they would use other facilities during that 18-months period, so it is obvious that they do have facilities that have been used and would continue to be used until that time.

Mr. SIKES. Congressman, do you have some apprehensions about the economic effects on your area by taking usable lands or are there other aspects that your people object to in connection with this installation?

Mr. BALDWIN. Four people came back to testify on this before the Senate Armed Services Committee, but the House would not allow outside witnesses. One was a member of the board of supervisors which had passed a resolution against it. One was a member of the Fairfield Chamber of Commerce, which is the town nearby, which passed a resolution against it. Another was a member of the Fairfield Chamber of Commerce and Agriculture, which had passed a resolution against it. Another was a landowner who is right in the midst of the property to be acquired and represents the Farm Bureau in this area. And they feel that this Army proposal is going to take 22,000 acres and just deaden it until war comes. It might not be too bad if they were going to do something with it, even though they take the land off the tax rolls and really do something, because it would build up a payroll, and would, at least, have some offsetting features, but here is a proposal to take 22,000 acres and freeze it, not even put in any part of the installation, no railroad or any part of the port facilities; nothing. Just deaden it. They might lease it back for grazing but it is off the local tax roll. But no one would want it. It bars it from any constructive use in that part of the county, in an area that is rapidly developing. And, as I say, the people are all opposed to it because there is a safety factor here which has not been studied or considered. Because it is a fact that if some plane takes off from the Travis Air Force Base and does not make it, and runs into a ship or railroad car, the whole thing will be blown up in one fell swoop.

And since the House Armed Services Committee has already committed themselves to send out a congressional committee to see the situation and report back to it, all I ask is that you make no funds available until this has been done.

Mr. SIKES. You have made a very convincing statement to the committee, Mr. Baldwin, and I think the people you represent are very fortunate in the forceful and effective way you have presented the problem to the committee.

Mr. BALDWIN. Thank you.

Mr. SIKES. Any questions, Mr. Ford?

Mr. FORD. Off the record, please.

(Off the record discussion.)

Mr. SIKES. Mr. Miller?

Mr. MILLER. What is the situation with respect to the land now; has the Federal Government secured any option on this land, or is it to be condemned?

Mr. BALDWIN. The Federal Government has sent people out there to make estimates on the land, but I am not aware that they have any options as of now. They have told the people that they would have to wait until some congressional determinations were made.

Mr. MILLER. Is there not always danger, if the matter is held up until say 6 or 8 months prior to the actual development, of the possibility of speculation that might result in greatly increasing the price on the land?

Mr. BALDWIN. Well, let me illustrate by use of the map which I think will tend to answer your question and indicate that that kind of urgency, I do not believe, is likely to take place.

This is a topographical map. To orient you once again: This is Travis Air Force Base here, and this is the town of Fairfield [indicating]. This type of terrain is swamp area, as you can see here. This line here is the outer circle; they intend to acquire an easement to bar anybody from living in that area.

The inner circle represents the acquisition area. This part is swampland. This area in here, Potrero Hills, has farmland, some of which is in grain, some of which is grazing. There are 26 families which own the whole parcel of this area in here [indicating]. As you can see, on this central portion, this is not the kind of area that is going to change in a period of 6 months.

Mr. MILLER. I see.

Mr. BALDWIN. And as I say, all I am asking is that the House Armed Services Committee, which has already committed itself to send a subcommittee out there to study this situation in conjuncture with Port Chicago, have the opportunity to report before any appropriation is made.

Mr. MILLER. All they seek to acquire in that area is an easement, anyhow, is it not?

Mr. BALDWIN. In the outer circle.

Mr. MILLER. That would be a protective cushion, a protective area?

Mr. BALDWIN. This would be an easement [indicating] which would bar anyone from residing on this property. They could farm this part of it but they could not reside on the property. Of course, farmers do not like that. They would have to move away and when they are farming, they like to be on the property.

The next circle indicates the taking. But this would just sit there until mobilization day and they are not going to make any effort to put in the actual railroad connection, or to put in any actual piers or docks and the Army Department in their own testimony said that it

would take them 18 months to do that after mobilization day. So in the Senate hearings, the testimony is that it might be an indefinite period before they would put this into operation; so there is no great urgency.

And, as I say, Mr. Chairman, I am just asking that, since the subcommittee is going to study the projects, which are only 10 miles apart—Port Chicago and this other station, that action be deferred until that study is completed.

Mr. SIKES. Well, it appears that you are making a reasonable request.

Mr. BALDWIN. Thank you.

Mr. SIKES. If there are no further questions, we thank you very much for your testimony.

Mr. BALDWIN. Thank you.

FRIDAY, JULY 1, 1955.

WHITTIER PORT, ALASKA

WITNESS

DONALD N. UTHUS, REPRESENTING LONGSHOREMEN'S UNION, A. F. OF L.

Mr. SIKES. Gentlemen, we have with us today Mr. Donald N. Uthus, who wishes to discuss the port activities at Whittier, Alaska. We have had Mr. Uthus with us before and I think his interest in this construction activity at Whittier has been well stated, and that the subject matter he is going to discuss will be of interest to the committee.

You may proceed, Mr. Uthus.

Mr. UTHUS. I think it was about 2 years ago that I appeared before the committee.

Mr. MILLER. What has happened; did not the whole thing burn up?

Mr. UTHUS. You are exactly right; and shortly after I went to Alaska to review the situation. Since that time, neither the attitude nor the activities in the port have changed decidedly.

Mr. SIKES. Why not just preface your statement with some brief remarks concerning the problem so that there will be continuity in the record?

Mr. UTHUS. The problem is the releasing of the military control over the port of Whittier, and the discontinuance of the use of GI's for stevedoring work.

After the port was burned down, they brought in one of these De Long floating docks, and while it did not have the capacity of the original port, it served their purpose adequately, because they do not have too much traffic in there now.

The traffic during that period was diverted to Seward. Very little of it went over to Anchorage and the port of Anchorage and the union and the chamber of commerce decried the fact that those who were representing the metropolitan area and the destination of most of the cargo had very little shipping into that port.

It is true that there is only one ship dock at Anchorage, but even that was not utilized to its fullest capacity. Since that time the

Army has acquired additional land in the port of Whittier and they have built what is described as a skyscraper apartment, and all efforts on the part of either the Legislature of Alaska, the chambers of commerce, and the unions have been to no avail. In 1954, we were unable to come back to this committee, and we sought the assistance of the Armed Services Committee, and they carried on a series of correspondence and had some hearings on the subject.

The excuses of the Transportation Corps in succession ran like this: The nonavailability of labor, which was disproved; the lack of facilities to handle, the longshore labor; the high cost of private enterprise; and the last justification was that they needed the troops to handle cargo there for training purposes.

All of those things were disproved on the basis of the evidence, the last of them being for the training program, because longshoremen and stevedoring is just one step below common labor and requires no training. The last reason given that closed the door was because of military necessity.

Since that time the Transportation Corps has engaged an engineering firm by the name of Wire from New Jersey to make a survey of the ports of Seward and Whittier, in Alaska, and stateside, Seattle and Portland, I believe, in anticipation of introducing a sea-train transportation system, and in the report this engineering firm pointed out facts which justified the use of Whittier as a commercial port, entirely supporting our records for the last few years; and they wind up with the recommendation that the port of Whittier be used for the Alaska end of this sea train. Delegate Bartlett wrote to the Defense Department and asked for a report on that situation, and they came back and stated that the Transportation people—in the Department of Defense—would support the sea train, and that the port of Whittier would be made available, the point being that they are willing for the sea train to make use of the port of Whittier for commercial traffic for the sea train. The question is, What circumstances that obtain now, would be any different, upon the completion of the sea-train program?

The situation in Whittier examplifies the encroachment of the military on the civilian or private enterprise system, and due to the cessation or reduction in military construction, job opportunities have been reduced appreciably, and instead of making the job opportunities available to the civilian labor market, these has been a growing encroachment on the part of the military in Alaska. The legislature of Alaska has memorialized both the President and the Congress on this subject, and of the whole, the situation in Whittier is the most horrible example.

The Whittier complement, I believe, is 1,200 men and I think, as a result of this committee's inquiries a way back, it was admitted that the port is not being maintained for security reasons.

Now, it may be that the military situation has changed, but Whittier is the only port in the world that is under complete military control.

The Army Transportation Corps actually controls the economy in Alaska, because with the port of Whittier closed to commercial traffic, and with the balance of the shipping directed into Seward, the port of Anchorage, for example, gets very little traffic, even though Anchorage is the destination for most of the cargo.

The Anchorage people have voted a bond issue of $2 million to encourage the Crops of Engineers in building a port at Anchorage. But that is being held up also by reason of this sea-train proposal.

The Wier report indicates that the majority of traffic—(60 percent—is civilian, 40 percent of the traffic to Alaska, is military, and they also say that the sea train will not be successful unless they funnel all or a major portion of the traffic, including civilian, to the sea train.

The cost of living in Alaska is directly connected with the cost of transportation and has a direct bearing on the reduction in business also.

Whittier, I repeat, is a horrible example of military encroachment and the people in Alaska are pretty desperate about it.

Despite all of the evidence to the contrary, the Transportation Crops maintains that the port of Whittier must remain a closed port.

Mr. SIKES. It is your position, I believe, that there is adequate civilian labor available to do this work and that the military component at Whittier could be reduced if the military would put more emphasis on the use of civilians?

Mr. UTHUS. That is right.

Mr. SIKES. Do you have any comparable costs in handling cargo as between the military and the cost of goods handled by civilian personnel?

Mr. UTHUS. Mr. Donald O'Connor made an economic survey for the Department of Interior and that was when they were trying to determine whether to abandon the line from Portage to Seward, and in that report he covered the cost of handling cargo by civilians and the cost of handling it by the military at Whittier. It was his estimate that it would run somewhere in the order of $50 a ton if you were to include all of the military costs.

The Transportation Corps presently is charging the Air Force $20 a ton, which is more than double the highest priced contracts anywhere in Alaska, handled by civilians.

Mr. SIKES. There are no seagoing contracts which are higher than $10 a ton?

Mr. UTHUS. That is right.

Mr. SIKES. In Alaska?

Mr. UTHUS. That is right.

Mr. SIKES. And the Army is charging $20 a ton for handling the cargo?

Mr. UTHUS. That is right.

Mr. SIKES. And if you take into consideration all of the costs of the military operation, it would be more nearly $50 a ton for Army handling cargo?

Mr. UTHUS. That is correct.

Mr. FORD. Is the $10 a ton for military or civilian?

Mr. UTHUS. That is for civilian.

Mr. FORD. Is that for both military and civilian?

Mr. UTHUS. No, that is civilian.

Mr. FORD. Is that for the handling of military equipment and military cargo?

Mr. MILLER. Well, most of that goes into Whittier?

Mr. UTHUS. It goes into Whittier and is handled by the military.

You are talking about ammunition?

Mr. FORD. I do not know how you would break it down, but I would like to know, is there a differential between handling military cargo and civilian cargo?

Mr. UTHUS. No; there is subsistence and all that sort of thing, but I think it is the same general cargo; there is no differential.

Mr. MILLER. The ammunition comes under a different category?

Mr. UTHUS. Yes; that would be correct.

Mr. MILLER. Would there be any difficulty with respect to carrying ammunition, using the Army facilities?

Mr. UTHUS. No; because ammunition presently is handled—it does not go into Whittier. It goes into Valdez and Seward.

Mr. MILLER. It does not go into Whittier?

Mr. UTHUS. No.

Mr. SIKES. Is it handled by civilians at Valdez and Seward?

Mr. UTHUS. Yes.

Mr. SIKES. Are there facilities at Whittier for civilian loading and unloading, or do they have to make use of military facilities?

Mr. UTHUS. They would have to use military facilities because, as I say, they have expanded their facilities until there are no other facilities. But the same thing is true at Seward where cargo is handled over the Army dock.

Mr. SIKES. Thank you very much for your statement, Mr. Uthus; and if there is anything else you would like to submit for the record, we will be glad to have you do so.

Mr. UTHUS. Thank you.

Mr. SIKES. At this point in the record we will insert comments prepared by the Army with respect to the testimony just received.

(The comments referred to follow:)

At the request of the chairman, the Department of the Army submits the following comments with respect to testimony by Hon. John F. Baldwin, Member of Congress from California, and Mr. Donald Uthus.

A. COMMENT WITH RESPECT TO MR. BALDWIN'S TESTIMONY

Government acquisition of the Potrero Hills site by purchase and restrictive easement is necessary at this time to insure that an adequate safety zone free of inhabitated areas will be available for construction of the terminal subsequent to mobilization. At present the Potrero Hills site is the least developed and populated of any of the areas considered for a terminal. It consists of 80 percent pasture, 18 percent marsh, and 2 percent cultivated land, with only 26 families residing in the area. Delay in acquisition will allow the area to develop to the extent that it will be more costly to acquire, and will cause a greater impact on the economy of the area than at present.

Eighteen months is the time required to construct the complete terminal. With land acquisition and dredging completed, construction of one wharf and supporting facilities could be completed in 12 months. This 1 wharf (2 berths) would then be used for outloading operations during period required to construct the second wharf and the remainder of the terminal.

The acquisition, in fee, of the land required for actual operation including railroad right-of-way, channels, administration area, and clearing for the barricaded area totals only 11,015 acres. This portion would be removed from the local tax rolls. The remaining 11,345 acres, lying outside the area acquired in fee, would be acquired by restrictive easement and would remain on the tax rolls of Solano County. All of the above land could continue in full use as crop and pasture land, and hunting and fishing could be continued, until actual construction starts subsequent to mobilization.

The possibility of plane crashes resulting from the proximity of the Travis Air Force Base to the proposed Potrero Hills terminal site was fully considered

when the site was selected. Department of Defense Directive No. 4145.1, July 23, 1952, prescribes the minimum safety distances between airport runways and taxiways and ammunition storage and handling operations. The distances from the end of the nearest runway of the Travis Air Force Base to the proposed Potrero Hills terminal operational areas far exceed those required under the above directive. The distances from the end of the nearest runway of the base is 14,500 feet to the classification yard of the terminal and 23,000 feet to the nearest wharf.

The 11 miles of dredging required for the proposed Potrero Hills terminal is the most time-consuming element in the development of that terminal. Completion of the dredging at this time would save an estimated 6 months in the time required to place the terminal in operation subsequent to mobilization. A shortage of dredging equipment when required would further delay completion of the terminal. As previously stated, with land acquisition and dredging completed, one wharf of the proposed terminal could be placed in operation 12 months after starting construction. Upon completion of the dredging, silting of the channel would be very slow in this area because of no large inflow of water, and maintenance dredging to remove the silt would seldom be required.

With land acquisition and dredging completed, one wharf and supporting facilities of the Potrero Hills terminal would be completed in 12 months after starting construction. In the meantime, the use of unsafe terminals at great risks to the civilian population would be held to a minimum on the west coast pending completion of the Potrero Hills terminal. Ammunition outloading requirements for the first 12 months of a war are considerably less than for subsequent months.

B. COMMENT WITH RESPECT TO MR. UTHUS' TESTIMONY

Department of Army witnesses have already testified that port facilities now existing at Whittier are designed only for the military cargo load, and there is no surplus port capacity which could be used for commercial traffic. Testimony has also been given to the effect that there is little or no flat land area available on the Whittier Fjord which could be used to construct commercial wharves. Finally, the only means of land access to the port is a railroad going through the tunnels. This single-line railroad might be taxed if sizable commercial cargoes were handled through the port.

The proposal that civilian stevedores be used instead of military stevedores is one which has been made many times. The position of the Department of the Army is best set forth in letters to the chairman and chief counsel of the House Committee on Armed Services, dated December 31, 1953, and December 22, 1954, respectively. These letters are quoted herein:

DECEMBER 31, 1953.

Hon. DEWEY SHORT,
Chairman, Committee on Armed Services,
House Office Building, House of Representatives.

DEAR MR. SHORT: This letter is in reply to your most recent expression of interest on behalf of Mr. A. A. Owen, Jr., agent for the International Longshoremen's Association, Anchorage, Alaska, concerning the possibility of stevedoring at the port of Whittier being turned over to private industry.

As you were previously notified a further inquiry has been made and I am now informed that the matter has been fully and carefully reviewed by the commanding general, United States Army, Alaska. The port of Whittier is a military port and the use of military stevedores is considered vital, not only for logistical support of Alaskan Command, but also for defense and strategic reasons. Much of the military costs and overhead would continue even if civilians performed the stevedoring.

There is no civilian community at Whittier and the nearest location where one might be constructed is at Portage, 12 miles distant. Estimates have indicated that an expenditure in the order of $10 million to $14 million would be necessary to provide civilian facilities at Whittier and an expenditure of $6 million would be required to provide a highway to Portage. The only known alternative to these expenditures would be a pay condition providing travel allowances from Anchorage for intermittent gang requirements, and boarding allowances while at Whittier. These factors would require a prohibitive stevedore rate.

Operations at Whittier are fluctuating with peaks and valleys in stevedoring workload. By maintaining military stevedores in sufficient quantity, Whittier has in the past been in a position to handle peak loads and to fit training require-

ments into off-peak periods. Such a fluctuation in workload would make it extremely difficult and expensive for a contractor to maintain an adequate working force.

In case of emergency, military forces in Whittier are available for immediate shifting to other Alaskan ports on short notice. This would not be possible in the case of civilian stevedores.

It might also be pointed out that at the present time considerable tonnage moving to Alaska for ultimate military application is on commercial bills of lading and, therefore, handled by civilian stevedores.

I trust this information will assist you in advising Mr. Owen. If I may be of further assistance please call upon me.

Sincerely yours,

FLOYD L. PFEIFFER,
Lieutenant Colonel, Infantry, Liaison Division

DECEMBER 22, 1954.

MR. ROBERT W. SMART,
Chief Counsel, Committee on Armed Services,
House Office Building, House of Representatives.

DEAR MR. SMART: Reference is made to your letter of October 14, 1954, and interim reply to you of October 20, 1954, on the subject of continued use of military stevedores at the port of Whittier, Alaska. Your inquiry was on behalf of Mr. A. A. Owen, Jr., of the International Longshoremen's Association.

Utilization of military stevedores at Whittier is based on a decision that such operation is necessary to the defense of Alaska in case of enemy attack. Several factors bearing most importantly upon this conclusion are described below.

Tactical plans call for strong defense of the Whittier area, with military stevedores being needed as part of the ground defense forces, if necessary. These stevedores represent manpower not only trained in stevedoring operations but also in ground defensive combat operations.

In the event of hostilities complete military control of Whittier is considered essential to avoid possible compromise of troop movement and highly classified cargo movements. This would not be possible with civilian stevedores.

In addition to this need at Whittier there is a need for a ready supply of military stevedore personnel throughout Alaska in the event of an emergency. There is no way to insure the continued presence of civilian stevedores at any given spot in the event of an imminent outbreak of hostilities. The continued presence of military stevedores at Whittier insures a supply of stevedores for that port, and such other ports as might be utilized during an emergency in accordance with plans for the defense of Alaska in the face of enemy attack. Accordingly, it has been concluded that substitution of civilian stevedores at Whittier would entail an unacceptable risk of continuity of essential port operations in event of emergency.

I trust that the foregoing information satisfactorily answers the questions you have concerning this problem.

Sincerely,

FLOYD L. PFEIFFER,
Lieutenant Colonel, GS, Operations Division.

Nothing has occurred since these letters were written to change the statements made therein. The Department of the Army cannot agree that the use of civilian stevedores at Whittier is in the best interest of the United States.

FRIDAY, JULY 1, 1955.

ACCESS ROADS, DEPARTMENT OF DEFENSE

WITNESSES

MAJ. GEN. PAUL F. YOUNT, CHIEF OF TRANSPORTATION, UNITED STATES ARMY

MAJ. GEN. ROBERT S. MOORE, OFFICE, SECRETARY OF DEFENSE (COMPTROLLER)

Mr. SIKES. General Yount, the committee will be very pleased to hear you at this time.

General YOUNT. Mr. Chairman, we are here in the interest of the supplemental appropriation in the amount of $2,250,000 for access roads. This special amount is covered by the firm requirement as furnished by certification to the Secretary of Commerce by the Secretary of Defense. If you wish, I can list the projects that are involved in this.

Mr. SIKES. Very well.

(The statement referred to follows:)

ACCESS ROADS

ARMY INSTALLATIONS

1. Installation: Fort Carson, Colo.—

(*a*) Access-road mileage: 5.7 miles.

(*b*) Type and width of proposed improvement: Four-line divided high-type pavement.

(*c*) Preliminary estimate of Federal access-road funds required: $159,120.

(*d*) Brief statement of justification: The present two-lane access road from Colorado Springs to Fort Carson is adequate for local traffic. However, due to increased activities at Fort Carson, it is necessary that the highway be widened to four lanes between Fort Carson and Colorado Springs. In view of other major expenditures by the State for highway construction to avoid interference with Fort Carson training requirements, it has been determined appropriate that access-road funds be used for this access road improvement.

2. Installation: Wilmington Ammunition Terminal, Wilmington, N. C.

(Name changed to: Sunny Point Army Ammunition Loading Terminal)

(*a*) Access-road mileage: 8.5 miles.

(*b*) Type and width of proposed improvement: Intermediate type surface including the widening of the present surface to 22 feet and the reconstruction of 3 small bridges.

(*c*) Preliminary estimate of Federal access-road funds required: $198,900.

(*d*) Brief statement of justification: Wilmington Ammunition Terminal is a new facility being constructed near Wilmington, N. C. The relocation of a State highway outside the reservation area and the construction of the new installation will change the volume and type of traffic on State Highway No. 87 near the terminal. Existing facilities are adequate for normal local traffic. To provide for the higher volume and heavier type of traffic, it will be necessary to widen and strengthen 8.5 miles of State Highway No. 87 and to reconstruct 3 timber bridges.

3. Installation: Locust Point Firing Range, Camp Perry, Ohio

(*a*) Access-road mileage: 0.51 of a mile.

(*b*) Type and width of proposed improvement: 22-foot intermediate type pavement.

(*c*) Preliminary estimate of Federal access-road funds required: $25,500.

(*d*) Brief statement of justification: The access road to the Locust Point Firing Range is a low-type township road suitable for local traffic only. Dur-

ing construction of the range, the contractor had to repair the road and maintain it. The access road is not structurally capable of meeting the minimum requirements for transportation of heavy military equipment and supplies to the range.

4. Installation: Building T–7, Hopfenmaier Road, Gravelly Point, Va.

(*a*) Access-road mileage: Approximately 250 feet.

(*b*) Type and width of proposed improvement: Widening and channelization of Hopfenmaier Road at its intersection with United States Highway No. 1.

(*c*) Preliminary estimate of Federal access-road funds required: $24,480.

(*d*) Brief statement of justification: Because of its inadequate and hazardous condition, reconstruction of Hopfenmaier Road approach to its intersection with United States Highway No. 1 is necessary to provide for traffic generated by defense activities in building T–7.

5. Installation: Mount Rainier Ordnance Depot, Fort Lewis, Wash.

(*a*) Access-road mileage: 0.3 of a mile.

(*b*) Type and width of proposed improvement: 22-foot intermediate-type pavement.

(*c*) Preliminary estimate of Federal access-road funds required: $16,443.

(*d*) Brief statement of justification: The construction of Washington primary highway United States Highway No. 99 as a limited access highway closed the entrance road to the main gate of the depot. The improvement of Lexington Avenue is necessary to provide a replacement road as a main access route to the depot from a newly constructed interchange.

6. Installation: WAAAC defense position, Seattle, Wash.

(*a*) Access-road mileage: 1.71 miles.

(*b*) Type and width of proposed improvement: 22-foot bituminous plant-mix surface.

(*c*) Preliminary estimate of Federal access-road funds required: $50,439.

(*d*) Brief statement of justification: It is necessary to place an adequate base on 0.36 of a mile of road and resurfacing on approximately 1.71 miles of road for safe and effective operation of vehicles to a newly established Nike launching and control site.

Total, Army: $474,882.

NAVY INSTALLATIONS

Installation: NAS Cecil Field and NAS Jacksonville, Fla.

(*a*) Access-road mileage: Repair of 5.6 miles and provide turnouts of approximately 11 miles.

(*b*) Type and width of proposed improvement: 22-foot intermediate-type surface, repairing 1 bridge, and construction of approximately 21 turnouts between Cecil Field and Jacksonville Air Station.

(*c*) Preliminary estimate of Federal access-road funds required: $62,730.

(*d*) Brief statement of justification: It is necessary to tow or haul disabled airplanes from Cecil Field to the Jacksonville Air Station, a distance of 11.1 miles to avoid major expense and duplication of repair facilities. The road is in need of repair and one bridge will not safely support the wheel loads of the aircraft. To avoid causing major delays of local traffic, it has been determined turnouts for towed aircraft should be constructed along the road.

Installation: United States Naval Ammunition Depot, McAlester, Okla.

(*a*) Access-road mileage: 0.009 mile.

(*b*) Type and width of proposed improvement: Strengthening 4 timber bridges on the 22-foot access road to the depot.

(*c*) Preliminary estimate of Federal access-road funds required: $13,770.

(*d*) Brief statement of justification: The axleloads of military and commercial vehicles hauling ammunition exceed the limitations on four existing bridges on a county road that is a direct route to the depot storage areas for ammunition. It is necessary that the bridges be strengthened to avoid a circuitous route through administrative and industrial areas.

Total, Navy: $76,500.

AIR FORCE INSTALLATIONS

1. Installation: Craig Air Force Base, Ala.

(*a*) Access-road mileage: 1.5 miles.

(*b*) Type and width of proposed improvement: Two lane gravel surface roadway.

(*c*) Preliminary estimate of Federal access-road funds required: $56,100.

(*d*) Brief statement of justification: The northeast-southwest runway is to be extended and a road relocation is necessary to eliminate conflicts in airway and highway clearances.

2. Installation: Maxwell Air Force Base, Ala.

(*a*) Access-road mileage: 0.23 of a mile.

(*b*) Type and width of proposed improvement: Four-lane high-type pavement including a highway-railroad grade separation structure over Bell Street (United States Highway No. 31) and the Gulf, Mobile & Ohio Railroad tracks.

(*c*) Preliminary estimate of Federal access-road funds required: $480,327.

(*d*) Brief statement of justification: Bell Street is inadequate in width to carry the present and foreseen traffic and there is lack of adequate dispersal roads to alleviate the present traffic congestion. Construction of the grade separation structure for traffic from United States Highway No. 31 bypass and principal city streets to the base will eliminate the conflicting movements and relieve traffic congestion.

3. Installation: Lake Charles Air Force Base, Calcasieu Parish, La.

(*a*) Access-road mileage: 3.0 miles.

(*b*) Type and width of proposed improvement: Construction of concrete road 24 feet wide and including 2 bridges.

(*c*) Preliminary estimate of Federal access-road funds required: $500,820.

(*d*) Brief statement of justification: The northern 1,465 feet extension of the existing northwest-southeast runway will require the closure of United States Highway No. 90 along the north boundary of the base. The proposed improvement provides a minimum replacement road.

4. Installation: Wurtsmith Air Force Base, Mich.

(*a*) Access-road mileage: 2.0 miles.

(*b*) Type and width of proposed improvement: 20-foot gravel surface and construction of 200-foot bridge.

(*c*) Preliminary estimate of Federal access-road funds required: $172,380.

(*d*) Brief statement of justification: To prevent hazard to the traveling public due to ammunition storage and provide for necessary expansion of the base, it is necessary that Bissonette Road, a local county road, be closed. It is proposed to construct a bridge across the adjacent Au Sable River, and a connecting road which will not only provide a permanent substitute for Bissonette Road but will provide access from the southwest gate for crash equipment to a remote runway approach area that has a serious accident history for crash and rescue work.

5. Installation: Greenville Air Force Base

(*a*) Access-road mileage: 0.80 of a mile.

(*b*) Type and width of proposed improvement: Relocation of 0.80 of a mile construction of an 18-foot intermediate-type pavement.

(*c*) Preliminary estimate of Federal access-road funds required: $48,654.

(*d*) Brief statement of justification: Road relocation is required to eliminate a major flight hazard created by traffic on an existing county road which traverses the clear zone at the south end of an instrument runway. The runway is used for training.

6. Installation: United States Air Force AC&W Station, P–49, Watertown, N. Y.

(*a*) Access road mileage: 1.00 mile.

(*b*) Type and width of proposed improvements: Two-lane intermediate-type pavement.

(*c*) Preliminary estimate of Federal access-road funds required: $55,080.

(*d*) Brief statement of justification: It has been necessary to place gravel in areas where base and surface failures have occurred to maintain essential services during spring breakup periods because of the heavy traffic loads generated

by the installation. The proposed improvement will provide an all-weather road to an essential defense installation.

7. *Installation: Altus Air Force Base, Okla.*

(*a*) Access-road mileage: 2.6 miles.

(*b*) Type and width of proposed improvement: A 24-foot intermediate type pavement and installation of 2 traffic control signals.

(*c*) Preliminary estimate of Federal access-road funds required: $213,180.

(*d*) Brief statement of justification: Expansion of facilities at the Altus Air Force Base requires the improvement of access facilities to the principal highways so as to avoid intolerable traffic congestion and decrease the frequency of traffic accidents.

8. *Installation: A. C. & W. Station, M–110, Bucks Harbor, Maine*

(*a*) Access-road mileage: 1.1 miles.

(*b*) Type and width of proposed improvement: Two-lane intermediate type pavement.

(*c*) Preliminary estimate of Federal access-road funds required: $45,900.

(*d*) Brief statement of justification: The existing road is a low-type facility and is inadequate for the present or anticipated traffic to the defense installation. The new installation will require a year-round all-weather highway connecting the installation to a suitable facility leading to a distribution center.

Total: $1,572,441.

Mr. SIKES. Have the projects all been authorized?

General YOUNT. Yes. So far as authorization is concerned, the authorization for access roads money is covered by the Federal-Aid Highway Act of 1950, as amended, which establishes a total authorization of $95 million for this purpose.

As of this date, $55.5 million have been appropriated.

Mr. SIKES. I take it that none of this authorization is contained in the bill that just passed the house?

General YOUNT. No.

At the time, the Department of Defense fiscal year 1956 budget was submitted, Mr. Chairman, there were only a few minor projects that had been certified, so the decision was made at that time to postpone requesting money for defense access roads until there were sufficient certifications to justify requesting funds from the Congress.

Mr. SIKES. General Moore.

General MOORE. I might say, Mr. Chairman, the legal authorization with respect to these access roads has never been included in the military construction authorization bill, and as stated by General Yount, is included as a lump sum amount of $95 million, in the Federal-Aid Highway Act of 1950, Public Law 769, 81st Congress, approved September 7, 1950, of which we have submitted specific requests for only $55.5 million.

Therefore, this item is authorized by basic law, and it is not necessary to submit it again to the Armed Services Committee of either the House or the Senate.

Mr. MILLER. What is your definition of an access road?

General YOUNT. In general, a road which provides access to a military reservation, defense industry, or is essential to a maneuver area.

Mr. MILLER. Which is necessary for the military?

General YOUNT. Yes.

Mr. SIKES. You have asked for funds in the amount of $2,123,823, according to the list you have submitted to us, but you are requesting of the committee, $2,250,000. Why the difference?

General YOUNT. The difference is accounted for, Mr. Chairman, by virtue of the fact that these are estimates only, and we have rounded it off to $2¼ million.

Mr. SIKES. Suppose in the interest of economy, the possibility is that we could cut it down to about $2 million?

General YOUNT. No, I do not believe so. I think in that event, Mr. Chairman, there would be just one project that we would have to eliminate. Actually these are based on the figures of the Bureau of Public Roads, and there is a fluctuation in connection with the costs.

Mr. SIKES. Is this a request for funds or is it a request for authorization to use existing, available funds?

General YOUNT. This is a request for funds.

Mr. SIKES. A direct appropriation.

General YOUNT. Yes.

Mr. SIKES. Does this carry you through the foreseeable future, at least until the hearing on the 1957 fiscal year request?

General YOUNT. No; it will not. This will only take care of the certifications which are presently before us.

Mr. SIKES. What should be your procedure on new certifications?

General YOUNT. They will remain unfunded until the next appropriation bill comes before the Congress.

Mr. SIKES. In other words, the plan is, when there is a requirement for additional access roads, to bring that requirement before the Congress?

General YOUNT. Yes.

I might point out, Mr. Chairman, that until last year these funds were budgeted for by the Department of Commerce and not by the Department of Defense. Effective for the fiscal year 1955, the Department of Defense budgets for the funds, and makes the transfer direct to the Bureau of Public Roads. In other words, we do not handle the expenditure of the funds.

Mr. SIKES. You have stated that these are estimates from the Bureau of Public Roads?

General YOUNT. That is correct.

Mr. SIKES. Any questions, Mr. Miller?

Mr. MILLER. I understand that what you are asking for right now is merely for the money which you will hand over to the Bureau of Public Roads for construction work?

General YOUNT. The projects for which we have already made certifications, yes.

Mr. MILLER. And certificates that come up later will be handled in another way?

General YOUNT. Yes.

Mr. MILLER. This is the first time that this committee has ever had to pass on this item—or was last year the first time?

General YOUNT. Last year was the first time the military budgeted for this. And I might state again, Mr. Miller, that these funds are for all three services, not just for the Army.

Mr. MILLER. And these are access roads, all military?

General YOUNT. Yes.

Mr. MILLER. Air Force, Army and Navy?

General YOUNT. That is correct.

Mr. SIKES. Thank you very much, gentlemen, for your appearance and the information you have brought the committee.

General YOUNT. Thank you.

Fort Sill, Okla.—Wichita Wildlife Refuge

Mr. Sikes. The committe is in receipt of correspondence from Congressman Thomas J. Dodd, of Connecticut, which will be inserted in the record at this point.

(The matter referred to follows:)

Hartford Bird Study Club, Inc.,
Hartford, Conn., June 16, 1955.

Hon. Thomas J. Dodd,
Representative from Connecticut,
House Office Building, Washington, D. C.

Dear Mr. Dodd: It is our understanding there is a proposal pending to take over the largest part of the Wichita Mountain Wildlife Refuge in the State of Oklahoma for use by the Army.

In accordance with a vote taken at our meeting on June 14, 1955, this is to record that the Hartford Bird Study Club, Inc., with a membership of 250, is very strongly opposed to this type of invasion of our Federal wildlife refuges.

Should there be a formal hearing on such a proposal we would appreciate your placing this letter in evidence.

Very truly yours,

Hartford Bird Study Club, Inc.,
Mrs. Erva B. Weeks, *Secretary.*

Mr. Sikes. The committee is in receipt of a statement of the Wichita Landowners Association of Meers, Oklahoma, and others regarding the proposed expansion of Fort Sill, Okla. This statement will be inserted in the record at this point.

(The statement is as follows:)

Statement of the Wichita Landowners Association of Meers, Okla., and Other Groups and Individuals as Presented by John I. Taylor of Elk City, Okla.

Gentlemen: I am John I. Taylor of Elk City, Okla., and represent the Wichita Landowners Association of about 75 families in and around Meers, Okla. We live near the Wichita Mountains Wildlife Refuge and the military reservation at Fort Sill, Okla.

Also, I represent the following groups and individuals in Oklahoma and north Texas:

The Daughters of the American Revolution of the city of Lawton
The Oklahoma Farm Bureau
The Oklahoma Garden Clubs, Inc.
The Oklahoma Cattlemen's Association.
The Outdoor Guide—magazine edited by Mr. Charles J. Brill
American Cattlemen's Association
The Oklahoma Indian Tribal Council of the Kiowa, Comanche, and Apache Tribes
The Comanche County Farm Bureau
The Kiowa County Farm Bureau
The Conference of the Mennonite Brethren Church of North America
Chambers of Commerce of Snyder, Roosevelt, Hobart, Mount View, and others.

Also I would call your attention to the fact that the American Farm Bureau Federation of some 1,600,000 farm families, by resolution which constitutes the policy of this great national organization, respectfully asks for a reconsideration and reversal of the land-buying policies of government.

We are appreciative of the opportunity to appear before you to oppose and protest the appropriating of funds for the proposed land purchase and transfer at Fort Sill, Okla., for the following reasons:

1. Because Fort Sill and the area thereabout is not now and never will be a proper area for guided missiles.

2. Because this is a productive area and contrary to the reports and testimony of the Army, except for the area (a) as listed, is productive rolling land.

3. Because this proposal does not do what the Army proposes it should. It does not lengthen the present range 1 foot.

4. Because the Wichita Wildlife Refuge is important to the welfare of the people of Oklahoma and north Texas.

5. Because we believe that the public land policy of our Government and its agencies should be severely reviewed.

6. Because this proposal will close the roads and isolate a vast area north of the reservation.

7. Because over 600 Indian graves will have to be moved.

8. Because Comanche County cannot afford to have this acreage removed from its tax tolls.

Gentlemen, this proposal is contrary to the desires and wishes of the people of the affected area. The Army has done well with the present area during World War II and the Korean crisis. Now in peacetime they desire more land. If the proposal would lengthen their range it might possibly be justified. Our people believe in a strong military arm of defense but they also believe in the preservation of the cultural and recreational values that this area affords. We hope that you will deny this request for appropriation.

Mr. SIKES. The committee will now stand adjourned.

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